

VALLEY FARMER.

A Monthly Journal of Agriculture, Horticulture, Education and Domestic Economy, Adapted
To the Wants of the People of the Mississippi Valley.

VOL. VII. SAINT LOUIS, FEBRUARY, 1855. NO. 2.

The Valley Farmer.

WOODWARD & ABBOTT, PUBLISHERS.
EPHRAIM ABBOTT, Editor.

OFFICE 210 BROADWAY AND 203 FOURTH STREET,
(Between Franklin Avenue and Morgan street.)
Entrance on Fourth street,
ST. LOUIS, MO.

TERMS.

THE VALLEY FARMER is published on the first of each month, each number containing 48 large octavo pages (including 8 pages devoted to advertisements of matters of interest to farmers), and is offered at the following rates:—

Single copy, one year, \$1 00
Five copies, \$5; seven copies, \$6; Fifteen copies, \$10
12 Payments, in all cases, must be made in advance.

Remittances in gold coins, current bank notes, or postage stamps, may be made by mail at our risk.

Agents.—Postmasters and Merchants throughout the country are authorized to act as Agents, and every friend of the enterprise is respectfully requested to aid in extending its circulation.

ADVERTISING.—Advertisements are inserted in the ADVERTISING DEPARTMENT of the Valley Farmer at the following rates:—One insertion of 12 lines, \$1; each additional insertion, 50 cents; 12 lines one year \$6; each additional 12 lines one year, \$4; one page, one insertion, \$7; each additional insertion, \$5; one page, yearly, \$50; Cards of six lines or less, one year, \$5.

REMOVAL.

The office of the Valley Farmer is removed to the four story building No. 210 Broadway, and 203 Fourth street, between Morgan street and Franklin avenue, two doors below Jefferson Hall; entrance No. 203 Fourth street. The Editor of the Farmer may be found at the office at all times when not absent from the city.

PRINTING OFFICE.

The printing office connected with the Valley Farmer, at our new place of business, as noticed above, is now in complete

order for executing every description of letter press printing. We have been making constant additions for several years past to our stock of materials, until we have now ample facilities for all kind of work. Persons at a distance wanting catalogues, circulars, addresses, labels, show bills, or commercial blanks of any kind, may rely upon having their work done accurately, promptly, and in the best style, at lowest living rates. We respectfully solicit a share of public patronage.

Farmers' Warehouse.

By the above notice it will be seen that we have removed our establishment to the large buildings near to the North Market. We have now spacious rooms in a very desirable location; and we intend doing a general agency and commission business in agricultural implements, tools, seeds, fruit trees, &c. We have now the agency of some of the best nurseries and manufactures in the country, and our arrangements are such that we can supply any article in our line as cheap as it can be bought in St. Louis. We invite our friends to call and see us when they come to St. Louis, and we can assure them that if they send us their orders, they will be attended to with promptness and on the best terms.

Garden Seeds.

We have for sale a choice lot of fresh garden seeds, put up by Landroth of Philadelphia, which we offer for sale at lowest rates. Orders for seeds to be sent by mail

will be promptly and carefully attended to. Call at the Valley Farmer office and Farmers Warehouse, No. 216, Broadway, for choice seeds.

Feed Cutters.

In addition to the Pennsylvania Feed Cutter, operated by horse power, we have on hand a supply of different kinds of Straw Cutters, operated by hand or foot, suited to persons who have only a few animals to feed. The prices range from five to eighteen dollars.

The Corn Planter.

Our readers will find considerable space devoted to this implement. We believe the importance of a good planter to the farmer—one that will plant straight rows each way—is a sufficient excuse for giving prominence to an article which promises to answer this description. We have a supply of them for sale at our office, and shall be happy to fill any orders from our friends. Price of the Corn Planter ten dollars.

Plows.

We have for sale at the Farmers' Warehouse a supply of Samson, Walker & Co's Steel Plows—the "Belleville Clipper." These Plows are fully equal to the best Peoria Plow, and considerably cheaper. The manufacturers say of them:— "This Plow of which we manufacture different sizes, received the Diploma at the late Agricultural Fair, and compares favorably with any other, in goodness of timber, steel and iron, and cannot be surpassed in workmanship—the lay and mould are both steel, and the upright wrought iron. Thus durability is ensured—whilst easy performance in our clay soil is promoted. Besides, the model is such, that whilst thirty-three per cent is gained in draft, the most perfect plowing is done; the whole of the furrow is turned, and the lay puts all that is taken." Also, for sale as above R. Owen's celebrated Breaking Plow.

MISTAKES.—It is impossible but that mistakes should sometimes take place, and, therefore, we find that we made a few mistakes in sending out our bills in the December number. We are always ready to correct any mistake of this kind, and, therefore, we hope that none of our subscribers will get mad because they received a bill, even if they did not owe it.

There is yet a good deal of money due us on the last and previous years. Will not delinquents bear in mind that we are in the midst of an unexampled monetary pressure, and every dollar due us is imperatively demanded to carry us safely through. We do not wish to distress any person, but if the thousand little debts, ranging from one to six dollars due us were paid, which they could be with very little inconvenience by those owing us, it would help us mightily.

Remittances.

We shall, in the next number of the Farmer publish a full list of all the letters received at this office containing remittances, or upon matters of importance, from the date of last list published by us.

Orange Orange Plants and Seeds.

Our readers will please notice the advertisement of McGrew, Leas & Co. in this number of the Farmer, offering Plants and Seeds, for sale at Kankakee City, Ill. This is a branch of the Dayton Company, which has contracted so largely with the Illinois Central Railroad Company.

The Committee of the Ohio State Board of Agriculture, appointed last fall to examine hedges entered for premiums, made the following report in relation to Mr. McGrew's hedge, awarding to it a premium of \$25.

"Upon Mr. McGrew's farm, seven miles westerly from Dayton, the committee found a Hedge which they most cheerfully endorse, as being eminently calculated for a 'farm' Hedge. As Mr. McGrew is preparing an essay upon 'farm Hedges' for the forthcoming Agricultural Report, in which a full description of his mode of propagation training and will be given, we

would refer those interested to that paper." We shall look for Mr. McGrew's second essay upon "Farm Hedges" with considerable interest, and shall lay it before our readers as soon as we receive it.

Illinois Agency.

Messrs. T. WALKER & Co. of Belleville, are general agents for the sale of Agricultural Machinery, particularly McCormick's Reaper and the articles made by Sampson Walker & Co. Belleville. Our Illinois friends will do well to call upon them for these articles. See advertisement.

S. W. Jewett, Esq.

We would call the attention of stock fanciers to this gentleman's advertisement. Mr. Jewett is one of the largest dealers in imported stock in the Union. We learn from him that he made last year some of the largest sales ever made in this country—his sales having amounted to over \$48,000, of which \$20,000 was since the first of September.

Pike County Nursery.

Messrs. STARR, BROTHERS offer for sale a large lot of apple trees in this number at their nursery in Pike County. This nursery is one of the best conducted and most popular in the country, and receives as it should a large share of public patronage.

GLACONADE Co.—A letter from Mount Sterling, dated Jan. 13th says: "Times are hard on the farmers here, but I could do without a good many of the necessities of life to read your paper. We had a very hard rain last Friday. The creeks were as high as ever I saw them. Wheat, that the fly has not troubled looks well."

LAFAYETTE Co.—A friend at Dover (to whom we return thanks for a generous list of subscribers) writes as follows, Jan. 15th: "We are still very dry, our stock suffering every little freeze. The hemp crop is ma-

tured better than I could have expected. The lint is lighter than last year, but the quality is good."

Blue Grass for Winter Pasture.

Mr. AMMOTT:—I wish to call attention to the subject indicated by the heading of this article, and as I do not recollect seeing the subject mentioned in the *Valley Farmer*, I propose giving the ball a roll or two, hoping some abler pen may take up the subject.

I remember when I was a little boy, the people used to drive their stock beyond the settlement in order to winter them on the cane. And I also remember, some twenty-five years ago, when people here in Missouri, used to drive their stock into the rush bottoms in some parts, to winter them, and run the risk of losing some of the weaker ones in the slough. Now, sir, if a good winter pasture is so desirable, is not the subject worthy of consideration? From my own experience in the matter, I propose sowing about one-fifth of my best farming lands and rotate like I do my clover, only I will let it stand four or five years. That intended for winter, should not be grazed in the summer and that intended for seed should not be grazed at all. I could tell you of a man in this county, who has forty acres of blue grass, which he kept up for winter grazing; he has a large drove of stock on it, and has not fed them up to this date, and has cattle fat enough for good beef.

G. M. CROOK

HOWARD COUNTY, MO.

THE LITTLE GIANT.—We received, too late for insertion in this number, a new advertisement of this celebrated Corn and Cob Crusher, now made by Messrs. Scott & Burt, in this city. The Little Giant has received the First Premiums at every State Fair from Missouri to Maryland the past Fall, and that in the most complimentary manner. Prices, \$44, \$55, and \$68, according to size. Address: "Scott & Burt, Broadway, St. Louis, Mo."

Flax Seed.

It has occurred to us, that we could not serve the interest of our readers better than to give them some thoughts on the cultivation of flax seed. This crop is exciting more than usual interest throughout the country, on account of the demand for the fibre, as well as the seed.

For many years, the most intelligent and thorough farmers in the older sections of the Union, have cultivated this crop for the seed alone; particularly, in Ohio, New York, and other Eastern and Middle States. The usual practice is, to raise on the same piece of land, a crop of wheat one year, and the next year Flax; sowing the flax early, so as to have it out of the way in time for early wheat sowing, and after the wheat is taken off, the stubble and a good stock of clover is turned under by a Fall plowing. There are farmers that have pursued this course for twenty years, without exhausting the soil, and always reaping profitable harvests every year, avoiding the loss of every alternate year in summer fallowing, as is usual with most farmers. The flax crop, when sown thin, as is the practice when raising it for the seed, leaves the land in fine condition for almost any other crop; a fact which is not generally known or appreciated.

It is a very common practice to sow barley and flax together, as they mature and are harvested at the same time, and can be threshed together, and the two very easily separated with suitable screens in the fan. This practice is meeting with much favor, and is said to be a very profitable method of cultivating both barley and flax seed: indeed, some farmers assert that the yield of flax seed is not diminished by the growth of the barley, nor is the yield of barley less on account of the flax seed. But we give these items, more for the expectation that every farmer will make tests for himself, than that he will take the statements as settled facts for all kinds of farms in all localities. But nothing can be more certain, than that the farmers throughout the entire West—the length and breadth of the Mis-

issippi Valley can make the cultivation of flax seed a very profitable crop, not second in value to wheat, corn, or any other; the seed always commanding ready sale for cash, at high prices. It is a remarkable fact, that the demand for flax seed has increased for the last year from one to two hundred per cent. The "Latourette Oil Works," of this city, completed and in operation the last year, are capable of consuming one hundred and fifty to two hundred thousand bushels per annum. The proprietors of these works are offering to contract largely, and offering every inducement to farmers to turn their attention more generally to the cultivation of flax seed. The Collier Lead and Oil works, of this city, [H. T. Blow,] also consumes about a large quantity of flax seed annually. In addition to this, there have been several Oil Mills erected this past year, within the range of country trading with this city. We subjoin some practical directions:

NATURE OF THE SOIL.

Almost any kind of soil will grow flax seed successfully, especially such as are adapted to wheat. If sown on rich bottom lands, you get a luxuriant growth of straw, but not so much seed, as when sown on upland. Clay, hardpan, or sandy lands, are better for a good yield of seed, though rich loam, or prairie lands are good, especially if they are rolling and well drained. It must be borne in mind that, a selection with a view to a good crop of seed is quite different from one for a good crop of fibre—the one requiring a harder, dryer soil; while the other should have a low, rich, moist land. A dry season is favorable to a crop of seed, while a wet season is almost indispensable to a good crop of the fibre.

PREPARATION OF THE GROUND.

The ground for flax seed should be plowed the fall before, and again in the spring, and finely pulverised with a heavy drag. Thorough deep plowing, and pulverising the earth, as far as possible, should never be neglected. The seed should be sown broad cast, and should have

as light a covering of earth as possible, and, to this end, a brush should be used instead of a drag, so as not to cover the seed too deep. The field should be laid off in furrows or lands, and trenches run with the plow to carry off the surplus water.

TIME OF SOWING.

It may be sown as early in the spring as can be done with safety against frost — Many persons pay little attention to frost and sow quite early, some even sow it on the snow in February or March, as about nineteen cases in twenty frost does not injure it; but there is a particular stage of the growth of the young sprout, when, if the frost takes it, it will perish, which gives the preference to ordinary spring sowing. If not sown till rather late in the spring, it frequently does not get sufficient growth before the dry weather overtakes it. Therefore, sow late enough to avoid frost, and early enough to secure early spring rains.

KIND OF SEED.

Particular attention should be taken to get large, full, and well matured seed for sowing. Where the crop has been very thick on the ground, the stalk is pale and weakly, and does not afford sufficient maturity for the berry, and seed from such a crop should always be avoided. The best plan is to have one corner of a field sown on purpose to get seed for sowing the next year, and on this corner, the less seed you can get evenly scattered over the ground, the more vigorous and matured will be the stalks and the seed. There are different varieties of flax seed, and some are preferable to others for their seed yielding and oil producing qualities. But it is so difficult to get any pure species, it is, perhaps, better to disregard varieties, and select seed for its apparent goodness. Always sow pure flax seed, without any mixture of foreign seeds. Too much care cannot be taken on this point. Be particular to riddle out all yellow grass, cockle, mustard, rape, or other seed, and starting with a pure seed, you will have no difficulty with foul stuff, and will always have the greatest yield per acre, and

obtain the highest price when you market your seed.

QUANTITY OF SEED.

Much difference of opinion exists in regard to the quantity of seed to be sown per acre, but the probability is, that the quantity should be varied according to the condition of the ground, season, &c. The most successful raisers practice very light sowing, some even as low as eight quarts per acre; but a fair average quantity for all farms and all circumstances is, say, from twelve to twenty quarts, when the crop is cultivated exclusively for the seed—thus securing plenty of room for the stalks to stand upon the ground and spread out their branches, and giving the sun access to their roots, and securing strength of earth for nourishment and maturity of the stalk. When sown thin, the stalk branches nearly down to the ground, and each branch is loaded with bolls. When sown thick, the stalks are spindling and weak, and often have but a single berry on the top, and, perhaps, no seed at all; besides exhausting the soil to a wonderful rate. A piece of ground that has been burthened with a thick mass of flax fibre, is good for nothing for years after. When sown thin for the seed, the fibre is very short and coarse; but in the new linen process, as well as for the paper mills, is quite equal to the fine fibre. In Ireland, where the finest linen is produced, it is not uncommon to see as much as twelve bushels of seed sown to the acre, so that the stalks are little above fine threads, growing up through each other in a dense mass, and producing no seed at all. In Russia, the German States, and other portions of Europe, and in India, the quantity sown is regulated more to a view of both seed and fibre, and the quantity ranges from 1 1/4 to 2 3/4 bushels per acre.

TIME OF HARVESTING.

Flax seed should be cut before it is quite ripe, when the bolls are beginning to pass from the yellow to the brown color, and it is better to let it lay a few hours, if the weather is dry, before binding it up,

so that the seed can fill and ripen from the nutriment remaining in the stalk. If it is left standing till it is quite ripe, a large proportion of the seed will be lost in gathering the crop.

MANNER OF GATHERING.

The crop can be cut with the cradle, or in any of the usual modes. After laying in the swath a few hours, it should be bound up in bundles and put in stack, or barn, secure from the weather. Some farmers mow the crop the same as hay, and handle it in bulk; but the best way is to cradle, rake, and bind in bundles.

THRESHING—TIME AND MODE.

It should be threshed as early in the fall as possible, and in a time of dry weather, for if it lays too long, the seed is apt to adhere to the shell, and is more difficult to thresh and clean up, and for the same reason, it should not be threshed in damp weather.

CLEANING UP AND MARKETING.

The seed should be cleaned up on a barn floor, and in still weather. When it is cleaned up in the field, or when the wind is driving dust about, the dust and dirt gets in with the seed, and a great deal adheres to the seed, in spite of all efforts to clean it with the fan, causing it to look dull and dusty, and the oil makers will not buy it as prime seed. When it is cleaned up and ready for market, it should be put into new, strong bags; for there is no other seed, or grain, that will creep out of so small a hole, or that is so likely to burst the bag. If the seed is plump and clean, and your half bushel is correct, you will find that it will more than hold out by weight. The standard weight of a bushel is fifty-six pounds, and you will find that prime seed will go sixty pounds.

P. S.—In connection with this important subject we give the following notice from the proprietor of the Latourette Oil Mills, offering to contract for Castor Beans and Flax Seed. The farmers of the West will do well to pay attention to it.

Flax seed is now worth in this market \$1.25 per bushel.

LATOURETTE PATENT OIL WORKS.

For the manufacture and sale of Linseed and Castor Oil,
CORNER OF MORGAN AND SECOND STREETS,
St. Louis, Mo.

HAVING completed these works, and being fully prepared for a large business, I can offer unusual inducements to farmers, affording them a ready market for all the CASTOR BEANS and FLAX SEED they can raise.

I will contract the usual spring, with responsible Farmers, for One Hundred and Fifty Thousand bushels of CASTOR BEANS, to be delivered next Fall.

I will also contract with responsible Farmers for One Hundred and Fifty Thousand bushels of good merchantable FLAX SEED, to be delivered next Fall. Payments in all cases to be made in gold and silver.

D. L. LATOURETTE.

Oil Cake.

Too little has been thought of this article by our stock growers, indeed, it seems to have escaped the attention of most of our farmers. It is a remarkable fact, that of all the oil cake manufactured in the West by our oil makers, about nineteen-twentieths finds its way to the old country. England is the largest oil making country in the world, and her farmers not only consume all the oil cake, made at home, but most of that produced in this country. One pound of oil cake is estimated to be equal to three pounds of corn in nutritious qualities; and cake shipped from this city to England, costs the farmer, say three cents per pound. While here, the same can be had at our oil mills, at about one cent per pound, in the greatest abundance.

Horses, cattle, and sheep, will eat it with avidity, and thrive wonderfully on it. It is especially good for old, stiff, hide-bound animals, and will soon make a wonderful change in their vigor and appearance. A small quantity twice a day, fed with hay, or cut feed is the best. Too much of it, at first, will cloy an animal, especially if they have not been accustomed to it for some time. It is especially good for milk cows, increasing the quantity and quality of the milk. Also for sheep, fed with chaff or straw. Also for poultry and hogs.

For the Valley Farmer.

The Jeniten.

The time is at hand when farmers look over the catalogue of Nurseries in their reach, to make out an assortment for the new additions to their orchards, or to plant out new ones. The projected railroads in

duce the farmers and other men of enterprise, to enter into this improvement on a larger scale. Now, as a nurseryman, I had the chance to notice already, that a majority of the selections fall on the newer, less tried—partly exotic kinds—neglecting our old and tried friend the Jeniten, or Rawle's Janette, as may be it is more properly called. In former years, farmers bought of me, sometimes nothing but Jeniten; generally, in an order for one hundred there were seventy-five Jeniten.

Now, I would not insist so hard in the old beaten track, was it that the new kinds had proved in the generality of desirable points, superior to our old tried friend Jeniten. But, to now, I have not yet found one of the fashionables, capable of contending for the first range, with our Jeniten—a native of the West, and likely of Missouri.

The Jeniten is a thrifty tree, forms naturally, a peculiar but well shaped top, puts out latest of all varieties, which saves often the blossom when other varieties are frosted. It bears its fruit all over the limbs, it is a regular annual, good bearer. The fruit is of more than medium size, makes first-rate, and a good deal of cider, withstands freezing when once housed—keeps well, and sells in the West by quantities, at least, as well as any other variety.

In my opinion, the Jeniten is yet one of the most profitable kind of apples for farmers; if I am mistaken, it would be a benefit to the public, if the superior varieties were made known.

Respectfully yours,
JULIUS MALLINKRODT.

AUGUSTA, Mo., Jan'y 23d, 1855.

For the Valley Farmer.

AUGUSTA, Jan'y 27, 1855.

A few weeks ago, I sent you an article stating my opinion, founded on experience, that no newly introduced kind of apples did for Missouri, reach the value the Raleigh Jenet, or Jeniten, for farmers who plant an orchard for the sake of remuneration. I might have added a statement—what income I had from ten trees of that

kind, growing in my garden, and planted in the spring of 1837. But as I have not done it, and supposing it might be interesting to many of the readers of your valuable paper, I will do it now.

I have in my garden ten Jeniten apple trees in full bearing, of which I picked two hundred bushels of apples one season, besides the falling ones. The next season, they bore not so much, the previous crop being so large, that the trees had not so much chance to form buds for the following season. The last season my trees had increased greatly in size, and would certainly have brought me thirty bushels to an acre, had not the blight partly destroyed the fruit spurs with the formed young apples on them. Notwithstanding, I earned last season, about 180 bushels of apples from these ten trees. Part of them were stung by insects, which, together with the bruised ones, I made up into cider. As cider, they brought me net my labor, not counted fifty cents a bushel. The selected ones I sent to St. Louis, and think to realize one dollar per bushel net, freight, barrels, and commission, deducted.

As I am talking of cider making, I think it but fair to state, that I procured last season a cider mill and press, the manufacture of Mr. Hicock, of Albany, in St. Louis. In using it, the wooden cylinders lined with tin, and set with pikes, swelled by moisture so much, that the mill was not fit any more for grinding. I thought already to be humbugged, but my letter to the manufacturer, Mr. Hicock, in Albany, was promptly answered, and two new cast iron cylinders delivered to me free of charge, with the offer to refund the charge of a skillful mechanic to put them in the mill.

The cider mill and press of Mr. Hicock works now to my entire satisfaction, and I would not be without one for double the cost.

Yours respectfully,
JULIUS MALLINKRODT.

No legislation aimed at the vices of the poor, while sparing those of the rich, can ever be upheld in this country.



This new agricultural implement was briefly noticed in the Farmer for January. We now give a more full description of it, and its use.

It will be seen by the cut given above, that it is a *hand planter*. No team is required to work it. It is *light*, weighing less than ten pounds, and, a man can take it in his hands, and walk over the field with it, only setting it down at every second step to plant his two hills, then passing on to the next two, and so on, as fast as he pleases to walk over the ground; for it is a *double hand planter*, putting in two hills at once.

It is very simple in its construction, being, in this respect, one of the most remarkable machines ever invented. It has been said that "the wheel-barrow is the simplest of all machines, as it has but *one wheel*." This planter is simpler still, for it has no wheel or spring; it has only a *sliding tongue*, which is raised and lowered by the same downward and upward movement of the hand, that sets down and takes up the machine.



As will be seen in the cut, it consists of *A cross-bar* to connect the two halves of the machine.

An *upright* to extend from the cross-bar to the ground.

A *brace* to keep the upright in place, strengthen the machine, and furnish a fulcrum for the lever.

A *reservoir* to hold the corn.

In the large figure in the cut, an iron brace, and two iron straps to hold the lever, are represented. For these, a brace of wood (as shown in the small figure) has been substituted with decided advantage.

A *tube* at the bottom, about two inches long, to go down the desired depth into the earth.

A *sliding-tongue*. When entering the ground, the end of this tongue remains within the tube, extending down to the very bottom of it, and thus prevents its being choked; or in any way obstructed. Then, the tongue is raised out of the tube, and allows the corn to drop through the tube to the bottom, where it is left to grow.

A *lever* to raise and lower the tongue.

A *cup* is hollowed out in the tongue, to measure out the corn for each hill. By turning a small screw this cup may be made larger or smaller, so as to hold any amount of seed the farmer may prefer.

A *brush*, a brush off and keep back, (as the slide passes down,) all the corn but what is within the cup.

This is the whole machine. Not a single part can be dispensed with, and not one more is needed.

This machine, on account of the perfect ease and simplicity of its use, may rather be called a *tool*, and be classed with the hoe, the shovel and the spade. It even surpasses these simple tools in the simplicity of its use. For it requires but two movements, one down, and one up; while they require at least three movements, one to strike them into the earth, one to move the earth, and another to raise them again to the proper position for the next blow. For simplicity of mechanism and ease of working, it is unsurpassed.

The inventor, rightly judging that so good a machine is worthy of being well made, has paid particular attention to this point. No pains appear to have been spared to secure the best material for every part, and the most thorough and perfect workmanship. The result is, a light, yet strong and durable machine, working with perfect ease, freedom and regularity.

Such is the Planter itself. Now for the results of its work:

1. It puts the required number of seeds in each hill.

2. It puts the corn at the right depth,

and the same depth, in every hill.

3. It presses the earth under and around the seed. This favors moisture, and in dry weather the corn germinates better than that planted in other ways, while in the compressed earth the young plant becomes more firmly rooted.

4. It covers the seed lightly, yet sufficiently, thus allowing the blade to spring up freely, and develop itself in the highest degree of perfection.

5. It plants the kernels close together in a little row. This favors close and clean cultivation with the plow or cultivator alone, and gives the weeds no chance to grow among the corn.

6. It does its work with such facility and expedition, as to make a great saving of time, labor and money.

This is not theory. The new Planter has been fairly tried. Its mode of planting has been put to the test of actual and extensive use in the field. In Dr. Leigh's advertisement, published in the present number, will be found the statements of some eighteen farmers who used this machine last season, and planted with it three or four hundred acres of corn.

The results, as stated by them, are most remarkable. Not only did one man plant eight or ten acres, or even more, in a day, and do it "easily," thus "saving an immense deal of labor," but the corn "came up better," "had a better growth," "stood stronger and firmer in the ground," was "easy to tend," and even "tended twice as well," and "gave a better yield" than hoe-planted corn by the side of it.

These are large statements, almost too large and too good to be fully true, and yet there seems to be no reason to doubt their correctness. They certainly deserve attention. It is especially worthy of notice, that "corn planted with the machine in dry weather, came up sometime before hoe planting which was done at the same time," and that the regularity and closeness of the planting secured so clean and easy cultivation, that Mr. Boone, of Beloit, Wis., says "I consider it a great saving of labor in

planting, but it saves more in cultivating."

An implement that will do all this, or even the half of it, must usher in a new era in corn planting. Five hundred acres of corn, dropped and covered in fifty days by the easy work of one man only, and done better than by the present method, is no small matter. It is a great step in advance. A few such steps as this will place agriculture by the side of manufactures and steam navigation, in the march of modern improvement.

Cross Marking.

In laying off the land for planting corn, we have, hitherto, sought to secure three things—straight rows; a uniform distance, usually about four feet each way; and a drill, or furrow, in which to drop the corn. Sometimes, we wish, also, to stir the hardened soil.

To effect one or more of these objects, various methods have been adopted. The tooth-marker, or the runner-marker, and the plow, are most used. Where the field is clean, the runner-marker answers quite well. To the plow method, there are serious objections.

It is too slow, it marks off but one row at a time.

It is expensive, and toilsome. Instead of being a labor-saving method, it is the very opposite. We only need to stop and think a moment to perceive this clearly.

We turn up furrow after furrow, two miles to the acre across the field one way, and then as many more athwart the other way—making four miles to the acre, and all just to make little holes some two inches deep, to drop in a few kernels of corn at the crossings, and then we send another man, plow and horse, toiling over the field again, turning back the long furrows, two miles more, just to put an inch or two of earth over these few kernels. Eight feet of furrow turned up to make a hole large enough for a half dozen kernels of corn, and four feet more turned back to cover them!—Must we still go on, moving tons of earth, in order to get a few ounces in the right

place? We have done it hitherto, without sufficient reflection, and not yet knowing of any better method.

But recently, a "more excellent way" has been pointed out to us; one that is not only quick and easy, and labor-saving, but also clears the ground along the rows from stalks, clods, &c., and prepares the way for closer cultivation with the plow, without disturbing the young hills of corn. It also enables us to make the rows as straight and true as we please, and to cover the hills all alike to exactly the right depth.

For this method, we are indebted to the inventors of the new Corn Planter, which offers us so great facilities in getting in our corn. Being western men, living in the midst of western corn fields, they have applied their practical good sense and keen powers of observation, to discerning the wants of western farmers at the present time, and have taxed their ingenuity to supply these wants in more than one respect. In laying off the ground, they aim, not only to make straight rows at the right distance each way, but to level and clear the surface in the line of the row, so as to prepare the way for easier and better cultivation afterwards; an object that has been generally overlooked, though some have tried to attain it imperfectly, by harrowing in the corn—a very objectionable method. The method employed to secure these objects is this:

A wedge-shaped piece of timber, three feet long, nine inches high, nine inches across the head, the front end brought to an edge and shaped like a runner, shows the form to be used for each mark; thus—



Upon two or four of these, (according to the nature of the ground,) four feet apart, or at whatever distance you wish to set the rows, a scantling should be laid and pinned. The tongue should be so framed into it, that, when one end is in the neck yoke, the marker will be level on the ground.

The following are the advantages of this method:

1. It does not work deep into the soil.

It prevents planting too near the hard, cold subsoil. The level action is the best for securing the warmth and air, and is not exposed to dryness. It is the safe medium.

2. It makes a wide mark, within which the plow point, or cultivator tooth, may pass, and not tumble lumps and other coarse matter upon the corn.

3. The *slape grades*, makes a level surface, and moves aside old corn stalks and roots.

4. It marks three or four rows at once. The plow can mark but one, and hard work at that.

If we wish to stir and pulverise the soil along the rows before putting in the seed, we need not take the plow. That is too slow and moves an immense amount of earth needlessly. We have only to insert a small cultivator-tooth at the point, or forward end of the wedge-marker, (see the figure above). This will stir the ground all we can desire, and in the right place, leaving the rest of the soil to be stirred at the proper time, when we come to cultivate the corn after it comes up. It is necessary to stir and turn the soil. Few persons do this sufficiently. It does not hurt the ground; but it is good economy of time and labor to move the soil at the *right time*, in the *right way*, and just enough to secure the object in view. The method here described, accomplishes this; the plow method involves an unwise and wasteful expenditure of time and labor.

The ground being marked out in this manner, we *might* go on in the old way—throw the corn into the middle of the crossings, press it down an inch or two with the foot, and then cover it with the hoe, or kick the earth over it, as some now do. Even *this* would be better than covering with the plow—now too deep, and now too shallow; and anon, pushing the seed out of its place and leaving it there; some to germinate too slowly, far down near the cold sub-soil; some to struggle through the overlying mass by which it is loaded to such a depth, that it finds the light of day with

Di-
isen
VAL-
books
scribe
its bir-
have
and so
dollar.
a deter-
club.
have
whole
ling 24
all the
necessi-
If you
the club
Here
of the V
to subsoi

difficulty, if it ever succeeds in reaching it; some to sprout quickly and then dry up from being too near the surface; much of it, from one or other of these causes, to die and rot, and be planted over again; and some to come up so far aside from the row as to stand in the way, and be torn up by the roots when the "go-ahead" plow or cultivator comes along.

But there is a still better way. We are not obliged to move the earth upon the seed, — to hoe or plow, or kick, or drag the earth over the corn. In no such way can we secure a uniform depth, and just the right depth in covering. Why not put the seed into the soil, instead of dragging the soil over the seed? In this way, we can deposit the seed at just the right depth with perfect uniformity.

It is to accomplish this, among other objects, that the new Corn Planter is designed. And it is most admirably adapted to effect this object with great speed and precision. We believe, that all who adopt these methods of marking off and planting will gain immensely, not only in getting in their seed, but in after cultivation.

Good for Egypt.

DEAR SIR:—Enclosed I send you six teen dollars; subscription money for the VALLEY FARMER. By referring to your books you will see that I have been a subscriber to your valuable paper ever since its birth to the present time. Sometimes I have succeeded in getting up a small club, and sometimes I have sent on my single dollar. This year, however, I set out with a determination to get up a club — as is a club. Considering that I live in Egypt, I have exerted myself to the utmost in my whole county, and have succeeded in getting 24 subscribers. I will still try to get all the subscribers I can, as I see the great necessity for such a paper in my vicinity. If you send any thing to me for getting up the club let it be seeds.

Here I would ask through the medium of the Valley Farmer when is the best time to subsoil land for corn. I am about to test

the effects of subsoiling, which I am not aware has ever been tried in Southern Illinois, notwithstanding it is a fine farming country of considerable wealth and enterprise.

M. A. G.

Union Co., Ill.

REMARKS.—When the ground is surface plowed it should be subsoil plowed. Ground plowed in the fall and subsoil plowed, will be in condition for planting earlier than if plowed in the spring. We think the best way to prepare ground by subsoil plowing, would be to plow the surface soil and the subsoil in the fall, then plow the surface soil before planting in the spring. The advantages of subsoil plowing are permanent and beneficial at any season of the year.

GOV. MATTISON ON AGRICULTURE.—In his message to the Legislature of Illinois, on the opening of the session of the Legislature, Gov. Mattison thus speaks of the agricultural interests of that State:

"The agricultural interests of the State has in a great measure been overlooked by the legislature. I would call your special attention to this subject. Agricultural prosperity lies deep at the foundation of national growth. Having a soil of remarkable fertility, with a uniform average quality, she has the inherent qualities and capacity for the support of a dense population. To develop these advantages to their utmost extent is to every citizen a subject of great interest and importance. To carry out and encourage this subject, two State fairs have already been held, and have given evidence of valuable results. Perhaps no better means can be devised to stimulate and encourage agricultural advancement, and it is submitted whether the appropriation from the treasury, in aid of these objects, may not be increased to three or five thousand dollars a year, with great profit, to that interest in our State which is at the foundation of all greatness. I am fully satisfied that the State would in the end reap a rich reward for all money expended in this way."

In the intercourse of our life, we are more frequently pleased with our faults than our good traits.

For the Valley Farmer.

GYPSUM OR PLASTER.

MONROE COUNTY, ILL., Jan. 23d, 1855.

MR. ASSR.—Dear Sir:—Being confined to the house with effects of a severe attack of influenza, in order to keep off ennui, I must read, write, and do as well as I can to employ my mind. I received the January number of *The Valley Farmer*, for 1855, in which I see an inquiry from Mr. J. R. Eldridge, of the most approved method of applying plaster.

I was a farm hand from my eighth year until my twentieth, and have been a cultivator of the soil, more or less, as a laborer or renter, up to 1850, since when, I have become owner and occupier of some land myself, in this county—which was in a state of nature five years ago—on the Mississippi Bluffs, twenty-five miles south of St. Louis, in the State and county above named.

My object in this communication is, to speak of the application of Plaster to the different kinds of grasses, grain and bulbous plants, so far as it comes under my notice; and as I heard the opinions of different farmers expressed in Franklin county, Pennsylvania; and Washington and Frederick counties, Maryland, as to the beneficial results of plaster. Plaster, at one time, was much used there, and at this time, more or less. Of course, my own observations will not be so extensive, and as hirelings are not treated, in general, as being very observant and intelligent in some quarters, their means of acquiring agricultural knowledge will be circumscribed to narrow limits. I left that country for this in 1845.

The first I had to do with plaster was in 1818. I, with a bag of plaster ground fine as flour, a tin dish, and a table spoon with half the handle off, was taken to a few acres of corn, and first shown how to operate, with directions to put two spoonful of plaster around the stalks of corn on each hill, if but one stalk. One spoonful, what the result was, I do not know, but I do know the operation was a tedious one. I was

transferred to an uncle, married to my mother's step-sister, before the corn was matured. In consequence of the war with England, plaster became high, and was used sparingly until after peace was concluded. In 1817, if my memory serves me right, my next operation was plastering corn—as it was called—that is, taking a quantity of plaster in a bag as we called it—some would say sack—as much as the operator could conveniently carry, from which he would take a handful, so as not to drop any, and scatter on the top of the blades of growing corn, which was generally about the time the stalk would have three or four leaves, sometimes later. It was always preferable, if it could be done when the ground would be wet, after rains, or when the dew was on the corn, that the lye drawn from the dust would run down the leaves to the joints, and as the theory ran, to the roots. Plaster would show no effect if the ground was dry, until after a rain, no matter if two or three weeks would elapse. From one half to a bushel, was about as much as I ever helped to put on, by dropping on corn, or sowing broadcast to the acre, on grain or grass, except by the spoon operation.

While servant boy under my uncle after 1818, I sowed nearly all his plaster, and did my part at plastering the corn, as we termed it.

There was not so much regard paid to time and proper state of the ground for sowing plaster by him, as he really acknowledged, and results not unfrequently showed it in the crops themselves.

I found that the quantity above mentioned, was the prevailing custom, whilst many of the most prominent farmers favored the opinion, that half a bushel to the acre does near, or quite as much good to the then growing crop, as a bushel.

Plaster was extensively used in all kinds of grasses and grain, and even on flax for a number of years, until the rust began to attack their wheat, rye and oats. The opinion took then, that plaster gave too vigorous a growth to these grains, kept them

I have you this the name you are you this

green too long—hence, overtaken by the rust or mildew. They had quit plastering their wheat and rye, some eight years before I left, in our parts, and not long after, quit plastering their oats, corn and clover, and most of their grass. Plaster is still used; mostly, on corn, by dropping; sowing broad-cast on clover and grass.

If ground plaster were come-at-able, and not too high, any person might prove to his own satisfaction its effect, by sowing broadcast on a clover patch, or plat of grass, by laying strips ten feet wide between.

The finer plaster is ground the better; but the finer it is ground, the more calm should the weather be when sown. When a farmer's system will permit, morning and evening, when there is little or no wind. The time of year we sowed our plaster was April or May. April for grass and grain, latter part of April and first of May for clover. Some would sow as early as possible in April. I never saw any striking difference in soils of like nature and fertility.

We could buy our plaster from 37.1-2 cents to 50 cents per bushel at the mills. To buy a ton, or half ton, we generally would get 28 bushels, strike measure, for \$8 50 to \$10. Twenty-eight bushels is what a ton of well ground plaster will make—half a ton at the same rate. The difference in price would be mostly caused by the difference in price of the different years in Baltimore, for the stone. In my young days, the farmers would bring the stone from the city to the mills. Millers would grind it for them for \$2 per ton. But since the public improvements are opened, millers go to the city, buy the stone, ship it to the nearest point to their mills, hire the neighboring farmers to haul it to the mill, and they then supply the farmer with what they want. Many of the flouring mills will have plaster mills attached.

I have said this much about plaster. If you think it will be of any service to any of the numerous readers of the *Valley Farmer*, you are welcome to lay it before them. If you think otherwise, if you are a smoker,

light your cigar with it, and thus consign it to oblivion. The writing of it has given my mind employment, and relieved me of the blues while writing.

D. M. L.

Fruits and Grains of Oregon

Mr. Wm. Ruble, who emigrated from Barry county, Mo., to Polk county, Oregon Territory, in the spring of 1853, and who finds that he cannot get along without the *Valley Farmer*, has sent us in a letter enclosing the pay for the *Valley Farmer* for two years in advance—packages of some of the seeds of rare fruits growing there, which we shall endeavor to have properly tested in Missouri. We thank Mr. Ruble for his kind attentions, and hope to hear from him often. We have a large number of subscribers in that Territory, and any thing from them is always received with thankfulness. In Mr. Ruble's letter he says:

"Enclosed I send you some seeds of our wild forests. I send you about one dozen Tew seed. This is a fruit-bearing tree here, and not one out of fifty people in Oregon know it, owing to the squirrels gathering it before it matures. I think that when cultivated, it will bear equal to the cherry.

"The fruit is pale red when ripe, very near an inch in diameter; very round; one seed in the centre; a deep uniform cavity at the bloom, and reaching to the center of the berry, and laying bare about one half of the seed, and of about the same size of the seed. This cavity is unlike all others that I ever saw; it passes from the bloom at the surface, being the same size at the center and circumference, and upon the whole, is a tolerable good fruit, rather too sweet—no tint of acid about it. Then I send you some salmon-berry seed. These berries are a great favorite with some here, are about one inch in diameter, shaped nearly the same as one end of an egg, are hollow inside, bear seed the same as the blackberry, and resemble them very much, except in color—one variety being nearly a gold yellow, the other a scarlet.

red—and is one of the handsomest berries known. When first ripe it has a high acid flavor, but if not gathered and made use of before getting too ripe, it spoils, and becomes one of the most disagreeable of berries. It is rather a sparse bearer, the bush, resembling the black-berry, continues to live and bear fruit from year to year. I saved three varieties of strawberry seed for you, but they are missing now.

There are growing here a wild service tree, highly worthy of cultivation. The berry is large brown, having the same flavor as the service berry of the States; but unlike it, it blooms after the leaves put forth, and is quite a different bloom, it is white with a narrow tassel. The bloom stands in clusters, and the fruit grows in clusters like currants. It comes out after all danger of frost is past, and is a very prolific bearer; some of this seed I will send next season. Nurserymen here say, that the wild raspberry is far superior to all the tame ones that they have. I am now testing its cultivation, and if it proves to be what I anticipate, I will send some seed of it. I have had opportunity to test some of this fruit dried, and I consider it the best dried fruit known. Any thing else you may desire, I will try and send. I send also, the product of one head of large white smooth wheat—111 grains.

I had forgot to say that the Tew tree is an evergreen, and very much resembles the cedar, is more wide spreading, and makes a very pretty ornamental tree, is fond of moist soil and cool exposure. The salmon-berry is fond of moist, sandy soil, such as an island.

WILLIAM RUBLE

CINCINNATI, Polk co., Oregon Territory.

P. S.—I did not rub out this wheat till this letter was written. I find it badly smutted, which was owing to its being green when the wheat was cut in which it stood. I have much better samples of wheat, but this I send on account of so many grains in one head, being 111.

W. R.

For the Valley Farmer.

MR. ABBOTT:—I have been taking the *Valley Farmer* for one year, and am well pleased with it; I would hardly be without it for five times the subscription price. I have been a practical farmer for nearly forty years, and subscribed for the *Valley Farmer*, because I love to read, and I thought I would set these words about farming. And now, let me tell you, that some how or other, my plow runs about as deep again as it used to do; and the result is, I made a good crop of corn last year, dry as it was.

Now, I will tell you how to prevent rabbits from eating apple trees: take a hog's liver, or that of any animal, and rub it well on the tree as far up as the largest rabbit can reach. This should be done early in the fall, and sometimes I have repeated the operation during the winter. I have never known this to fail for the space of nearly forty years.

MR. ABBOTT, I incline to think, that the first four volumes of the *Valley Farmer* contains much interesting matter, which is lost to new subscribers; I therefore suggest the propriety of republishing an appropriate article occasionally.

P. S. We are very much delighted with that department under the head of "The Family Circle."

Success to the *Valley Farmer*.

HOWARD COUNTY.

G. M. C.

REMARKS.—We doubt not many of our readers can tell the same story in relation to the value of deep plowing, the last season that is told by the above writer. We may allude to a little matter in this connection. We see in some of our eastern exchanges, articles to the purport, that it does not always do to plow deep: because by so doing, a barren subsoil may be turned to the top, in which nothing will grow. This caution may be, and no doubt is very well in those latitudes, but it is hardly necessary here. We have seen some deep plowing in the west, but we have never seen a barren subsoil turned up. Such results may happen, but we do not think

the likelihood of it sufficient to call for any particular caution.

We are a little apprehensive that our friend's plan of protecting fruit trees from rabbits, will not work well where dogs are allowed about the premises, as the reader will see from Mr Morrison's letter which follows. We believe dogs relish a bit of fresh liver, as well as "the rest of mankind."

The suggestion to reprint some of the articles in the earlier numbers of the *Farmer* had been anticipated, and the article on page 73 was already in type when the letter was received. We are glad to know that the Family Circle is appreciated. We consider it a highly valuable part of the paper.

For the Valley Farmer.

Rabbits.

DEAR SIR:—In your December number I have seen a piece to prevent Rabbits from injuring fruit trees. I have seen it tried, and the result is, that a young dog on the place injured the trees more in one night than the rabbits would have done in one year. I thought the trees completely ruined, but by banking earth around them to the depth the bark was injured, the trees recovered. I for the last ten years have used castor oil. It prevents animals from hurting the trees and leaves the bark with a rich glossy appearance. I believe it will prevent insects from injuring trees if they are rubbed with it; the worst kind of castor oil is good enough for the purpose.

If you think this worth publishing, you can make such corrections as you deem necessary.

WM. MORRISON.

Elkhorn, Illinois.

For the Valley Farmer.

Pasture Grass—Mad Itch.

MR. EDITOR.—I wrote you last season, wishing to receive through the *Farmer*, some account of grasses for pasture. I wish to know through some of your able contributors, which is the best for Woods pasture—Blue grass, or what is called Orchard grass; and what is the mode of cultivation, and how

much per acre I &c. And also, I want to know if you ever heard of a disease called the Mad Itch, and if so, I would like to hear from you; and if not, I wish you would make inquiry. I would like to hear the opinions of the stock raisers in different parts of the country; it is a disease that prevails to some extent in this section, and I would like to know the cause and remedy, and after I have heard I will give you my experience. More anon.

Concord, Illinois.

From the Saturday Evening Post.

Prolific Sheep.

At the great fair recently held near Philadelphia, by the Pennsylvania State Agricultural Society, some very peculiar sheep were exhibited, the merits of which were the excellence of the mutton and prolific habits. A premium of \$20 was awarded to the owner. They are a Tartar breed, and were imported direct from Shanghai, in the clipper ship White Squall, in the Spring of 1852. Hence they received the name of Shanghai Sheep. Dr. G. Emerson, of Philadelphia, procured a pair of these sheep, and another and only pair became the property of Mr. A. T. Newbold also of Philadelphia. From Dr. E. we learn that two of his Tartar or Shanghai ewes brought three lambs last February, all of which have been raised, and now (Nov. 29) two more lively lambs about a fortnight old. But this is not all, as the two ewe lambs born last February have each a lamb, making the old ewe a grandmother within nine months, and her progeny seven! These sheep breed twice every year and have, when at full maturity, from two to four, and even six lambs at a time. The fleece is rather hairy, but excellent for the coarser fabrics, such as blankets and carpets. The quality of the mutton is represented to be the finest in the world, delicate, and entirely free from any rank or woolly flavor. They are of good size, and very docile, have roman noses, drooping ears, and their faces are covered with a very glossy, short and silky hair. Their weight is about the average of our common country sheep, and they are very hardy. When the wonderful density of the population of China is taken into consideration, the single province of Shanghai containing as many inhabitants as the whole United States in 1840, we can readily understand why they have cherished breeds of animals calculated to supply them with the greatest possible amount of meat, while their grounds, never left to rest, have to yield three crops annually.

Illinois State Agricultural Society.

By a provision in the Constitution of the State Agricultural Society, the Society will meet in this city for the purpose of electing their officers, and for other business. The Society has now been in existence for two years. So far we believe it has been eminently successful in carrying out the objects contemplated by its friends, and with the experience already acquired it will hereafter do better than it has before done, becoming greatly useful in advancing the Agricultural and Mechanical interests of the State. Strangers have been astonished and delighted with seeing the fine stock exhibited at our State Fairs. Although other States may boast of some superior animals yet as a general thing our stock would compare, as a body, favorably with theirs. The great interest of our State is the Agricultural—and it is all important to our welfare that we should have the best horses, the best jacks, the best cattle, the best sheep, the best hogs, and we may say the best varieties of poultry, that can be found in the world. The State Fair excites a spirit of emulation, which we have already seen exhibited in the new importation of valuable animals—without regard to the cost—which must of necessity become of vast benefit to our farmers. The fairs, too, have brought into view, and into use, a great variety of agricultural machinery, vastly important to our farmers, as saving labor and making their business profitable. Since the first of our State Fairs a large number of shops for the manufacture of these articles, have been established in various parts of the State, and the demand for the result of their labor has increased and is increasing. Our State at this time, every portion of it being accessible to rail roads, is opening a vast field for the exercise of the beneficent influence of the state Agricultural Society. There are at this time many efficient county agricultural societies, whose exhibitions would do great credit to the counties of older States. *Illinois Journal.*

THE FARMER.—It does your very heart good to see a merry, fat, and round-faced farmer—so independent, and yet so free from vanity and pride; so rich and yet so industrious—so patient and persevering in his noble calling, and yet so kind and obliging. There are a thousand noble traits about his character which are rarely met with in city life. You may eat and drink with him, and he won't set a mark on you and swear it out of you with compound interest; he is hospitable. He will do you a kindness without expecting a return by way of compensation; he is generous; not so with every body. He is generally more honest and sincere, and gives society his best

support—in the firmest pillar that supports the edifice of government—he is the Lord of Nature. Look at him in his "home-spun gown," brook, gentlemen laugh at him if you will, but believe us he can laugh back at he pleases.

WHISKY AND NEWSPAPERS.—A single glass of whisky is manufactured from perhaps a dozen grains of mashed corn, the value of which is too small to be estimated. A pint of this mixture sells at retail for one shilling; and if a good brand, it is considered by its consumers well worth the money. It is drank off in a minute or two; it fires the brain, rouses the passions, sharpens the appetite, deranges and weakens the physical system; it is gone—and swollen eyes, parched lips and aching head are its followers. On the same sideboard upon which this is served, lies a newspaper, the new white paper of which cost three fourths of a cent; the composition for the whole edition costing from ten to fifteen dollars per day. It is covered with a half a million of types; brings intelligence from the four quarters of the globe. It has in its clearly printed columns all that is strange or new at home; it tells you the state of the market, gives accounts of the last development, the execution of the last murderer and the latest steamboat explosion or railroad disaster; and yet for all this, the newspaper costs less than the glass of frog, the juice of a few grains of corn. It is no less strange than true; that there is a large portion of the community who think the corn juice cheap, and the newspaper dear; and the printer has hard work to collect his dimes when the Liquor vendors are paid cheerfully. *How is this? Is the body a better payment than the head, and are the things of the moment more prized than things of eternity? Is the transient tickling of the stomach of more consequence than the improvement of the soul, and the information that is essential to rational being? If this had its real value, would not the newspaper be worth many pints of whisky?—Forest City.*

LORD SPENCER.—celebrated for his fine blooded cattle, said that he had observed that the worse breed the female is, the more likely is the offspring to resemble a well bred sire; and that he should decidedly prefer a cow of no breed, to an indifferent pure bred cow, for a good thorough-bred bull.

WHEN TO PAINT HOUSES.—A correspondent of the London Builder says that houses should be painted in autumn; woodwork painted in October, he says, looks better at the end of four years, than if painted in June, it would at the end of two.

From the Valley Farmer of April, 1855.

Three Experiments in Cultivation.

1.—FORTY ACRES CORN.
This was old corn land, which had, the previous year, under the anti-book system of farming, produced 25 to 30 bushels of corn and an indefinite quantity of weeds to the acre. Soil, a light loam, deep, with clay sub-soil.

The ground was plowed 14 inches deep, and furrows nine inches wide; harrowed and rolled; then drilled exactly north and south. Drills four feet apart, and planted 5 kernels in a place, two feet six inches apart. On the first hoeing all but three plants were removed from each hill.

On the 8th day of May, ten acres were planted with seed which had been soaked in a solution of three pounds of saltpetre and two of copperas. These ten acres yielded sixty-five bushels to the acre.

On the 15th and 16th of May, ten acres more were planted with seed soaked twenty-four hours in the same or a similar solution. The yield of this was one hundred and five bushels to the acre.

The remaining fifteen acres was not planted until the 5th of June, when it was planted with seed which had been steeped for thirty hours in a solution similar to that before mentioned. Many knowing ones predicted that this would be a failure—it would come to nothing. The result was that from these fifteen acres was harvested 1,680 bushels of corn—or one hundred and twelve bushels to the acre.

Now about the after-culture. As soon as the plants were conveniently above ground the plows were set to work, followed by the hoes. This time a light plow was run as close to the plants as practicable (and being properly drilled, the rows were perfectly straight) and the earth turned from the plant. Then the men with hoes removed every remaining weed, and loosened and leveled the earth about the plants. This done, a cultivator was run in the centre between the rows to level the ground, and give a finish to the weeds, which were showing themselves in legions.

As soon as the field was thus gone through, a second course was commenced. This plowing was the reverse of the first; a slight furrow was thrown to the plants, and again the men with hoes followed the plows, demolishing the weeds and drawing a small quantity of fresh earth to the plants. Again the cultivator was run between the rows as before.

By this time the weeds were pretty well mastered, and now a big plow was brought into use, to which were attached two powerful horses, placed one before the other. In going through first, the landside of the plow was held a few inches past the middle between the rows, and on coming back, the plow was run about two inches deeper, the landside again past the middle the other way. This time a man followed the plow to relieve any plants which might be borne down by the earth, and the work was done till harvest.

2.—THREE ACRES POTATOES.
This was upland, broken, soil much the same as the preceding; had been in pasture for eight or ten years. The ground was broken up in the early part of March, as deep as the plow could be run; afterwards harrowed, rolled, and ridged; the ridges were then split with a deep, running plow, and the potatoes dropped in the bottom of the furrow, eight inches apart. The potatoes were cut, so as to leave two good eyes to each set. Refuse straw, wet or dry, was now thrown over the potatoes, to the depth of several inches, and the whole deeply covered with the plow.

The rows were thirty-two inches apart. As soon as the sprouts began to appear at the surface, the field was cross harrowed, and during the season cultivated much as the corn, mentioned in the first experiment—plowed three times and hoed twice.

In November the potatoes were gathered, the ridges being opened by the plow running twice through each row, a by following the first time, to pick up such potatoes as might fall back into the furrow, and be trodden upon by the horse as he returned. The potatoes were very large, and there-

was no disease among them. A large portion of them were brought to this market this spring and sold for \$4.10 per bushel. The yield was 510 bushels to the acre. 3.—CUCUMBERS. [One-fourth acre, less 8 square yards.

This was a part of the field on which the potatoes were grown, and was broken in the same manner, but previous to planting the turf was entirely torn to pieces by plowing and harrowing, the whole completely pulverised, and the grass, roots, weeds—everything that ever had life—was picked up and carried off. The cucumbers were then planted in—not elevated—hills 7 feet apart in the rows, and with the rows 9 feet apart. The ground was kept mellow and free from weeds, and when the plants were a few inches high, forked stakes were driven into the ground on each side of the rows, about nine inches from the centre; these forks received a hickory pole, and were driven so as to elevate the pole nine inches above the ground. As the plants grew they were trained to fall over the poles, and then the leading runner was pinched off, with the fore finger and thumb nail; this caused the lateral shoots to push themselves along and twine themselves around the pole. The cucumbers were carefully picked every day, at the proper size for pickeling, and when a barrel was filled, brine made so strong as to bear up an egg was poured on enough to cover them, the barrel headed up and set in a cool, dry cellar. Forty barrels of cucumber pickles were made from this piece of ground, which sold in this market for six dollars per barrel. It may be noted here that in gathering the cucumbers, they were not pulled from the vines, but the stem was carefully cut with a knife or pair of scissors.

We are stating what has been represented to us by gentlemen on whose veracity we can rely, as actual facts and statements of crops raised last season; and the reader will please to bear in mind a few instructions which may be deduced from them.

In the first place these crops were raised in *Missouri*, on land no better than most

farmers in this State, Iowa or Illinois, cultivate, or say they do.

Except the straw thrown over the potatoes—and which was intended as a loosener, and not as a manure—no manure was applied in either case. There was no outlay for gypsum, lime, marl, prouddrette, salt, ashes or guano. The result is attributed to two facts—and nothing else—the ground was properly prepared and properly cultivated, and whoever adopts the same course may expect the same results.

One thing more we will mention: The course pursued in this case is exactly the one which we have all along inculcated in the *VALLEY FARMER*. The farmer who raised these crops is a constant reader of our paper, and assures us that he would not be without it if it cost him twenty dollars a year. He is in very truth a *book-farmer*, and carries on his whole business with as much system as any commercial business in the land. Some farmers in the West, think they know too much already to learn from any agricultural paper, and another class think they must get all their instructions from eastern periodicals—that no knowledge is of any value unless it comes from Albany, New York, Philadelphia or Boston. Of the first class we have little hope; they are "wiser in their own conceit than seven men that can render a reason," and though you should bray them in a mortar they would not be wiser. But for the latter there is a better prospect, and after they have got their fingers well burned in trying experiments totally unfitted to our soil and climate, they will learn to place a just estimate upon publications especially designed to meet the condition of Western Farmers.

The annual report of the Commissioner of the Land Office says that the vast immigration into this country during the past year has had a striking effect upon the land sales, which have brought during the last fiscal year the sum of \$5,000,000 into the treasury. The cheap postage system is working admirably. The General Post Office Department will make a remarkably good exhibit of its operations during the last year also.

Geological Survey of Missouri.

The Legislature of Missouri recently met in joint session to hear from Professor Swallow some remarks on the progress of the Geological survey of the State:

Mr. Swallow came forward, and addressed the assembly to the following effect: He was most happy to come forward and answer any questions which members might ask agreeable to the tenor of the resolution which the House adopted in the morning. He did not stand there for the purpose of delivering an address. He had been accustomed to express his thoughts with the pen and not with the tongue.

Mr. Blair rose and said he wished to know from the learned Professor how far the work had progressed and how near it was completed.

Mr. Swallow said he anticipated that question and had prepared himself to answer it. The survey commenced 18 months ago, and Dr. Litton, of St. Louis, an able chemist was appointed to visit the principal mineral regions of the State and analyse the ores. He visited the counties of Washington, Franklin and St. Francois and the results of his analysis are embodied in his report which will be embraced in the general report. Dr. Litton's synopsis will give very satisfactory analyses of the various minerals, accompanied as it will be by section maps illustrating minutely everything connected with that department of the survey.

Dr. Schumard who had been for several years engaged on the United States geological survey, had made examination of the counties of Washington, Jefferson, St. Louis St. Genevieve and St. Francois. He has laid down on the maps of those counties, the rocks and mines which they contain, and has examined the bluffs of the Mississippi for three hundred miles. Mr. Schumard discovered organic remains in the course of his examinations, which greatly extended science. 200 fossils, have been added to the stock of scientific knowledge and are now ready to be placed in the museums and cabinets of the State, together with specimens of all minerals in Missouri.

Mr. Meek, who had been connected with the New York geological survey, had made examinations in Moniteau county, and had given township sections and all the necessary details in his department.

Mr. Hawn, of the Hannibal and St. Joseph Railroad, was appointed assistant geologist to make examinations along the Hannibal and St. Joseph Railroad. The appropriation made by the Legislature for the survey, did not admit of compensation for him from that

fund, but the railroad company offered to pay him if he was associated with the survey by the appointment of the Governor and directed by the State Surveyor.

The documents prepared by those gentlemen will accompany the general report, with the maps on which the various rocks and minerals are marked together with analysis. His own object was to get a general knowledge of the geology of the State to direct the operations of his assistants. He had procured information from many scientific gentlemen upon the subject before he undertook the survey, among them Dr. Heyne. His first object was to ascertain whether the coal stratum lay above or below the beds of the Platte and Kansas rivers. The problem was to be solved, and the examination proved the existence of coal beds never described in any ancient scientific work—entirely new to the world. There were fifty different beds of limestone, sand-stone and slate, and three beds of coal interspersed. There was 300 feet of rock above the coal deposits, between the Kansas and Platte rivers. The coal lay in alternate layers, one bed being six feet thick, another three and the other two.

The scientific geology of the State was complete in itself, and could not be altered or affected by what was to follow. That portion of the report could not be altered or amended, and could as well be published now as at any subsequent time. The detailed survey was complete in six counties, and considerably advanced in fifty counties. The report of the survey in detail would give an analysis of the soil as well as a complete analysis of the various ores and minerals. The survey proceeded according to the great geological divisions of the State, and not according to the Geographical divisions.

Mr. Rollins inquired if Mr. Swallow and estimated the amount of coal discovered by the exploration along the Hannibal and St. Joseph Railroad.

Mr. Swallow replied that according to data furnished by English engineers, giving 100,000 tons to every square mile of coal, one foot in thickness, there must be 9,000,000,000 tons of coal within fifteen miles of the Railroad. There were 500 square miles of coal in Macon, 400 in Linn 400 in Livingston, and 500 in Chariton; and allowing the beds to be 12 feet thick on the aggregate, and allowing six feet for waste and other considerations, the calculations would give the amount the figures stated.

Supposing that the Railroad conveyed 100,000 tons daily to the Mississippi, the beds would not be exhausted for 900 years. St. Louis ought to use that coal, rather than continue paying tribute to Pittsburg. He was of

opinion that South-west especially in Newton and Jasper counties, was filled with lead, and miners told him they would much rather work in that region on account of the richness of the ore, than in Wisconsin, Illinois or Iowa.

The Osage Orange.

PREPARING NURSERY GROUNDS.—Great care should be exercised in selecting the right piece of ground, for the place of planting the seed. The soil should be deep, new, rich and free from the seeds of weeds and grass. It should be moist, though not wet, nor inclined to bake. Prairie land, broken the year previous, is undoubtedly the best. The ground should be deeply plowed, and finely pulverized with the harrow, and roll.

Proceed to lay it out in drills, eighteen inches apart. A convenient way of making these drills is as follows:

Take a piece of scantling, six or seven feet long, and bore as many holes as you can, having them eighteen inches apart. Into these holes drive plugs about a foot long. Let these plugs be all of the same length, and the ends made shovel-shaped, and four inches broad. A pair of shafts now for the horse, and some plow handles, fastened on for a man to guide it, and the implement is complete.

A wheat drill, with one-half of its planters raised, and broad points put on the others, is sometimes used. This makes the drill sixteen inches apart. If the drill is of the right kind, and the sprouts not too long, the seed may be planted at the same time. Prof. Turner has recently invented a drill for this purpose which does the work admirably without injury to the longest sprout.

PLANTING THE SEED.—The time for planting seed will of course vary with the season and latitude. In the latitude of Chicago from the first to the tenth of May will usually be soon enough. Mix the seed with a little sand or plaster if it is inclined to stick together, and drop it between all the fingers of the hand in the drills made as above described; putting one quart, to about three and a third square rods, or a bushel and a half, to the acre; cover with a hoe from one and a half, to two inches deep. Be sure to pat well the ground above so as to press the earth tightly around the seed. If the weather now be dry, the surface should be plentifully watered, as much depends on keeping the seed constantly moist after being put in the way to sprout.

TENDING THE NURSERY.—If the weather is unfavorable and the weeds start first, much labor will be saved, by scraping with a sharp hoe the top of the ground above the seed, just deep enough to cut the weeds.

In about a week or ten days, if the weather prove favorable, the young plants will be-

gin to appear; at first they are very tender, and will need care in weeding, but in a few days will become hardy and tough like the Locust.

When the plants get up in sufficient numbers to indicate the rows, the spaces between the drills should be hoed. After which the weeds and grass among the plants, should be pulled out by hand. Mind to take it in season before the weeds get the upper hand, as a few days' neglect will make the labor fourfold. If this first weeding is taken in season, and done thoroughly, the labor of raising the plants may be considered half done.

This method of hoeing the spaces, and weeding the rows should be repeated as often as is necessary to keep the weeds down, and the ground loose.

With proper cultivation, if the soil is good, and the season favorable, the plants will be sufficiently large to set in hedge the following spring.

TRANSPLANTING.—To take them up expeditiously a subsoil plow is used for cutting of the tap root. The share of the plow should be steel, quite large, and flat as possible. The depth of its running should be about ten inches, which can be regulated by a wheel on the end of the beam. After the plow has passed along, nearly all the plants will be found standing in their places, and they can easily be pulled up by the hand. Gather them in bunches, and cover the roots to keep them moist, after which they can be assorted and tied into bunches of fifty or a hundred, and tops cut off by a hatchet on a block. They are then ready to be sacked, or boxed, for shipping. When boxes are used they should not be so tight as to exclude the air, nor so large as to cause the plants to heat. A box twenty inches wide, same depth, and three and a half feet long, is a convenient size. We saw-dust thrown in among the roots will keep them in good order a long time.

HEDGE ROW.—If the land is poor and hard, a trench not less than two feet wide, and as deep, should be dug on the line where the hedge is to stand, and filled up with equal parts of well rotted manure or compost, and rich earth.

[The roots of the Osage Orange naturally grow very deep, which is a great advantage, enabling it to withstand the severe droughts, and preventing disturbances in plowing, &c., in after years; but if the ground is hard and poor beneath, this tendency is prevented, and the roots are forced to spread near the surface, or the hedge fails to grow. On deep rich soil, like river bottoms, the Osage Orange is particularly adapted, as it loves moisture, and bears flooding remarkably well.]

In uncultivated prairie or grass lands, a

strip not less than ten feet wide should be turned over along the line of the proposed hedge, during the summer or fall previous, and harrowed, or backfurrowed just before the time of setting in spring.

HEDGE LINE.—A convenient one is made by winding a strong cord, fifty or sixty yards long, around a board six inches wide; then, with a small brush, painting down the edges of the board across the cord, which will mark it at proper intervals for setting plants in a single row.

PLANTING THE HEDGE.—This may be done any time after the warm weather commences in the Spring, though it is well to wait until the buds are much swollen, and even if the leaves begin to put out, no matter, as there will be less danger of setting lifeless ones. Choose a moist time, otherwise wet the plants before setting. Select those of a uniform size as the best to be planted together, and shorten the roots, to within eight or nine inches, and the top to within two inches of the root. Stretch the line where the row is to stand, and set out the plants by the marks, or not more than six inches apart, in a single line thus,

The hole for inserting the plants, may be made with a pointed iron, twelve inches in length, three and a half inches in diameter at the top, with a socket into which to insert a handle. A pin may be put through the handle at the top of the socket, to bear the foot upon, in pressing it into the ground. Or, the holes may be made more expeditiously with the trident, an implement with three prongs set six inches apart. These prongs should be made flat or spatula shaped, ten inches long, and two inches wide. If inserted into the ground full depth, and worked once forward and back, it will make the holes large enough to admit plants. The plants are to be set in the holes an inch deeper than they stood in the nursery. With the same implement the earth can be worked up against the roots where it should be well packed. Two men with tridents can easily set one half mile per day.

To prevent moles from barrowing under the hedge, set the plants three or four inches lower than the sides, so as to leave the ground a little "dishing" toward the row; this is found effectual. The ground should be well cultivated during the season, or what is much better, cover the surface three or four inches deep, and two feet wide, on each side of the row, with cut straw or leaves. If these are not to be had, tan bark, or sawdust will answer. We would from past experience earnestly recommend this *mulching*; as it retains moisture for the plant, which otherwise would be evaporated, and acts subsequently as a

manure. It also saves nearly all the labor of cultivation.

Should any of the plants fail to grow, their places should be immediately supplied by taking up from the end of the row, or from a nursery reserved for the purpose. It is recommended never to set the plants further apart than stated above, as at greater intervals the stalks must grow larger and the roots extend proportionally; besides, it requires much more labor in pruning, for which the saving in plants is by no means adequate.

CARROTS FOR MILK AND BUTTER. It is only a few years since we had various recommendations for coloring butter to a deep golden yellow, by grinding up and mixing in the pulp of the orange carrot, but the best way that we found for giving the carrot color, was to pass these roots first through the cow. We have, with nothing more than an average decent cow, made seven pounds of butter per week, much resembling the best grass butter, besides using a small portion of the milk daily on the table. This was accomplished by the use of about a peck and a half of the white variety per day. We hope such of our readers as can, will experiment in the use of this root, the present winter and let us know the result. —*Albany Cultivator.*

WINTERING POULTRY.—I am not sensible of having a touch of the poultry fever, but I am satisfied that farmers might generally winter them in a manner to receive a greater profit for their outlay. For several years I have adopted a plan which has been a great improvement on the one of feeding them once or twice a day. Firstly, they should have a place in which to winter so warm that one seldom gets his comb frozen. Mine winter under my horse barn, which is twenty-four by forty-eight feet. Under the north half of the barn is a cellar for roots, and the bottom of the sill a trifle above the level ground on the north end. The land descends to the south, sufficiently to have an open shed under the south half, which is ten feet from the ground to the sill, and has a good substantial stone wall in lime mortar on three sides of it, but open to the south. Over this shed or open cellar are my stables, and the manure passes through the floor. This shed is occupied by cows and poultry, though the poultry have the same range they had in summer. Their roosting place is in one corner of this shed just below the sills, with a shelf by the side of the roost. As soon as they require feeding in the fall, I set a large box of corn or other feed on the shelf, and keep a good supply by them. For a fortnight they will consume more food than before, then become fat, and the rest of the winter I think they require no more

food than by the old method. The result has invariably been, if they stop laying in December, many of them commence in January and February, and through the spring months they do better than they did by the old treatment, and if a fat chicken is wanted they are sure to be found without the trouble of cooping expressly to fatten.—*Count. Gent.*

Linseed Cake—Its Use for Cattle in This Country.

Some time since, says the Louisville Journal, we alluded to the high estimation in which the British farmers held oil cake as food for stock, particularly for fattening beef and mutton, while its importance has been almost entirely overlooked by our own farmers. Until the present season the sale of oil cake in this market, for home consumption, has not exceeded 40 or 50 tons a year, and this has been principally fed by dairymen of foreign education.

We are pleased to learn that our farmers are now beginning to appreciate its value. The sales at the mill in this city the present season, we are informed, average 2 1/2 tons a day. It is chiefly bought by the enterprising farmers of Fayette, Bourbon, Woodford and Scott counties, some of whom have taken 10, 20 and 30 tons each; others have bought in smaller quantities by way of experiment. It is the most concentrated and nutritious of all the kinds of food. Not more than from 2 to 4 pounds should be given to each head of cattle a day, and this should be mixed with the meal and other grain and be thoroughly incorporated with cut hay or straw. It greatly improves the healthy condition of the skin, and gives the coat a fine sleek appearance, while it fattens most rapidly.

The supply of beef cattle in the United States is constantly falling off, and hence prices must rise high for a long time to come; and, while oil cake can be bought for one quarter or one third the price it will bring in England, it is folly to suffer it to go to feed British cattle and to enrich British soil.

Wheat bran has long been a favorite food for stock with many. It is now selling at about \$30 per ton, while its comparative value is not one tenth that of oil cake. As a general article of food, Roussingault estimates nine pounds of bran only equal to ten pounds of prime hay. With the present improvements in flouring mills the bran is but little more than the outer membrane of the wheat. It is valuable, however, at certain times, when fed to horses and other animals, on account of the laxative effect it produces. It also contains a large amount of bone earth, which renders it valuable for milch cows and calves; but used as it frequently is, about cities and

towns, as almost the exclusive food for cows, it is the least economical of any kind of fodder.

From the Genesee Farmer.

An Effectual Method for destroying Rats.

Many years ago, the old mansion in which my father lived, was so dreadfully infested with rats, that the basement of the building was quite undermined; seventeen large rats were caught in one week in traps, in the wine cellar alone; many died from poisoned bait, but still they increased. The servants believed the house was haunted, and certainly if the spirit rappers had been in fashion in those days, we might have been justified in giving credence to such outward manifestations of the Powers of Darkness—for truly, such midnight racing, and knocking, and rapping, were enough to startle the least timid;—but though poor, dear, old Mr. MARTIN EWEN got all the credit for the nocturnal disturbance, it was rats, rats, rats, and nothing but rats, that haunted the old hall. The rat-catcher was fairly beaten out; he had lost several of his best ferrets, and declared his belief that the house was bewitched, and that some one had charmed all the rats into the premises—for neither ferrets, nux vomica, nor any other rats-bane had the least effect upon them.

One day a stranger came to buy some barley, and hearing my father mention the difficulty he had in freeing the house of these disagreeable tenants, he said he could put him in the way of getting rid of them with very little trouble. His directions were simply these: mix a quantity of arsenic with any sort of grease, and plaster it pretty thick around all their holes. The rats, he said, if they did not eat the poison, would soil their coats in passing through the holes, and as, like all furred animals, they are very cleanly, and cannot endure any dirt upon their coats, to remove the offensive matter they would lick their fur, and thus destroy themselves. This plan was immediately put in practice, and in a month's time not a rat was to be seen about the house or barn.

TO MAKE AND KEEP BUTTER GOOD IN WINTER.—Scald your milk before you set it for cream. This will make the butter come quick and it will be sweeter. Work the milk thoroughly out of the butter, which should be made into large rolls, and then cut into slices an inch thick. Make a brine as follows: to one gallon of water put one pint of salt and a teacup of loaf sugar; dissolve well and strain it; then put in your sliced butter, and put on a weight to keep it under brine. Cutting butter in slices prevents it from having that brittle hardness to which it is liable when worked with a ladle.—*Mich. Farmer.*

CURE FOR FOUL IN THE FEET.—In the Rural of Dec. 9th, I see two recipes for curing foul in the feet of cattle by the use of a small rope, blue vitriol, &c., &c. I have used these and also corrosive sublimate, and have seen hot resin and hot tallow poured between the claws of the hoof, and even the knife used to cut away the affected parts, and other like barbarous remedies. But for the last fifteen years I have used nothing but carrier's oil, of a good quality and applying from three to six times has never failed to cure with me. I once had a cow so bad with the foul, that she could scarcely get up, and was entirely unable to walk, and I cured her in one week perfectly well, with nothing but simple pure carrier's oil. It is equally good for the foot of man when affected with what used to be called the ground itch, in or between the toes.

Rural New Yorker

TO MEASURE GRAIN IN THE BULK.—Find the number of cubic or solid feet in the crib or bin, and if the corn is in the ear with the husk on, deduct 1-4 of the whole bulk for the husk, provided the crib is settled, and then deduct 1-2 of the remaining solid feet for the cob, then deduct 1-5 of what remains and the last remainder will be bushels of shelled corn. The reason why you deduct the 1-5 from the feet to bring them to bushels is, five cubic feet equal four bushels and a small fraction over, but near enough for practical purposes. A bushel contains 2,150 cubic inches. In measuring shelled or threshed grain, simply find the cubic feet and deduct 1-5.

From the Prairie Farmer.

Curious Habits of the Brown Sand Hill Crane. (*GRUS CANADENSIS*.)

Many of these noble birds still nest in this vicinity, but their number is small compared with the numerous flocks that a few years since might be seen holding their strange dances on some favorite knoll, or feeding, while their sentinels, judiciously posted, stood ready to give warning of any suspicious intruder.

Some are credulous as to the dancing of cranes. It is true their movements are not as graceful as a Froehmann's or their quadrilles quite *à la mode*; but dance they certainly do. As for their music, though lacking the harmony, it is about as loud and melodious as a fashionable opera air.

The Sand Hill crane is omnivorous, devouring pretty much everything eaten by birds. The nest is a simple pile of rushes or grass—flat on the top, built in some deep slough or pond. The eggs, two in number, are shaped much like those of the common turkey, of a light amber color, splashed with brown. The nest is usually surrounded by deep water, but

the young birds swim readily, and leave it as soon as hatched. It is believed by many that they separate, immediately upon leaving the nest, each of the old birds taking care of one—the supposition being that they would fight if allowed to remain together. In corroboration of this somewhat singular idea, I can only say, I never found two of the young birds in company, and a pair which I had caused a hen to hatch, fought from the time they left the shell, till, in fact, they killed each other outright.

This bird is easily domesticated. I kept one for several years, who showed all the attachment and intelligence of a dog. He never forgot a friend or forgave an injury. If any one had abused him, it was of no avail to attempt disguise; he recognised his enemies in any dress, and by an angry croak showed his displeasure, and warned them to keep out of his reach. He was a great gourmandizer, and was very fond, among other things, of field mice, (*Arvicola*), many of which he destroyed, being quite expert at finding their nests, and searching out the inmates with his long bill. He would have been of service in the garden, were it not for his inquisitive propensities, which led him to pull up for examination everything he saw as plant. Though a desire for knowledge might be very laudable, this mode of obtaining it met our disapprobation, and eventually caused his banishment.

Though a migratory bird, he did not seem to suffer from the cold in winter, and being fond of wading, even kept a place in the neighboring slough free from ice till late in the season, by tramping about in it. I provided him with a warm house, but he preferred to sleep with the cows. He always slept beside one of them, lying flat on his breast, with his legs folded under him, and his head and long neck turned back between his wings. He was on good terms with all the cattle, and might frequently be seen playing with them; his part of the performance consisting in springing up, flapping his wings and whooping tremendously. This was precisely the same as the dancing of his wild brethren. He would also dance to the waving of a handkerchief; and on windy washing days sometimes danced for hours at a time to the clothes on the line. When much enraged, he would stand with his head and bill pointed directly upward, and utter a harsh, croaking sound, quite unlike his usual *whoop*.

A young crane makes no despicable article of food. The old ones, I should suppose, would be rather tough and snaky; but an old Indian hunter of my acquaintance says, "A turkey is not half as good eating."

Audubon supposed this to be only the young of the White Crane, but he was wrong. The

White Crane, (*Grus Americana*) is more of a southern bird, and exceedingly rare here. I saw a pair flying over this fall for the first time. These two species are among the largest and finest of our North American birds.

ROBERT W. KENNICOTT.

The Grove, Ill., November 15.

A Sheep Speculation.

A very verdant youth on the shady side of thirty, traveled out of sight of home for purposes unknown, and stopped at a hotel to procure refreshments. The usual loungers of the bar-room, together with a couple of drovers bound for the eastern market with a choice collection of sheep, were in that happy good humor said to be produced by a satisfactory dinner, going in for anything to prolong the cheer.

A tip of the eye from one to the other as he entered, indicated that they considered the awkward specimen "game," and "mine host" glanced inquisitively at his rough exterior, as though taking an inventory and balancing accounts for his dinner. The innocent object seemingly unconscious, stared at everything with dull satisfaction, and answered the queries addressed to him with a stuttering foreign accent, highly amusing. His dinner being ready he addressed himself to the "cold bite," not at all disturbed by the choice bits of conversation coming up from the bar-room below, such as "raw Dutchman—fresh from Baden Baden—devilish fine fun," &c., mingled with uproarious laughter, which suddenly ceased on his return.

"Sheep, eh?" he said, addressing drover No. one.

"Yes, sheep; wouldn't you like to purchase some four or five hundred to stock your farm with?" he inquired.

"H-h-how do sell 'em?" asked the Dutchman.

"Seeing it's you," said drover No. two, talking him by the button hole and speaking with mock seriousness, "seeing it is you, neighbor, you may have all you can pay for at two dollars per head."

"P-p-ick?" suggested Dutchman.

"Yes, have your pick, and take all you can pay for at two dollars per head."

"Well, I g-g-guess I will look at 'em;" so off went the drovers and Dutchman, followed by all the bar-room, even "mine host" himself, to see the fancy.

"You hear the b-b-bargain, g-gentleman," said this piece of rusticity.

"Yes, yes; we hear the bargain; have all you can pay for at two dollars per head. Come, hand out your money and pick your sheep."

Dutchman rather leisurely opened his ca-

pacious wallet, and surprised the bystanders by presenting in all twenty dollars, and proceeding to select his sheep. Here the drovers discovered that he knew what was mutton, and had probably learned to distinguish wool from another called hair.

"Hold on, man!" said drover No. one, "you've got your number, here's ten!"

"Wall, but m-may be I-I-I might find enough t-tu pay for a few more." So he threw over in all, one hundred and twenty-five, then straightening up—

"H-h-here's your money, sir; I s'pose I-I could p-pay for more, but I guess I-I've got all the g-g-g-good 'uns!"

The drovers found little satisfaction in the roars of laughter that greeted this announcement, and they cursed the Dutchman most heartily, who proved to be a Yankee after all.—*Rural New Yorker.*

CLEAN CLOVER SEED VS. CHAFF.—O. Nye, of Oakland, Jackson Co., writes as follows to the *Michigan Farmer*:—

Farmers are quite apt to get the idea that seed takes the best in the chaff, from the fact that they don't know how much seed they sow to the acre. It is quite frequently the case, that as much as a bushel of seed is put on to two or three acres. I came to this conclusion several years ago, under the following circumstances:—In 1848 I brought the first clover machine to this section of the country, and set it in operation; it was an experiment to the farmers, but all were willing to make the trial, and see if they could not get rid of the enormous expense and trouble of sowing chaff. One man in particular, a good farmer, and a great grower of clover and wheat, had forty acres to seed down to clover, and supposed that he had barely chaff enough to go over the whole field, but at last concluded to have it cleaned, and sow the clean seed. He had eighteen bushels of seed, enough to seed his land and twelve bushels to spare; in this one instance there was a saving of at least \$60.

Another instance was with myself last year, wishing to seed fifteen acres and having about chaff enough to go over the field in the ordinary way, I had concluded to sow the chaff, unless I could have it cleaned: before the last of February (for I never wish to sow after this time,) but good luck turned up, the threshers came, the chaff was cleaned, yielding eight bushels of clean nice seed, and not one-fourth split and destroyed either, but round, plump and sound. Two and half bushels of this seed was sown on my fifteen acres, leaving me a balance of five and a half bushels, worth \$35 1-2. Now if I had sown my seed without cleaning, it would have cost me nearly enough more to pay the expense of threshing, as a word to the wise sufficient.

The Garden and Orchard.

From the Horticulturist.

A Chapter on Seeds.

BY THOMAS NEENAN, PHILADELPHIA, PA.: 1855.

There are probably few branches of horticulture so ill understood as the management of seeds. A package of seeds may be placed in the hands of two men, divide between each, and sown by each in his own peculiar way; and while one succeeds in raising plants, the other fails. Sometimes the individual who succeeds in raising some particular seed one season, will himself fail in another, though to all appearances the seed was gathered, preserved, and treated exactly in the same manner. For want of attention to these variations and their causes, many erroneous notions respecting the vegetative powers of seeds have arisen, and many contradictory statements made by various writers, which need only a slight reflection on the principles of successful seed-saving and sowing to reconcile. For instance, some old writer, I think Hanbury, asserts that seeds of the Sweet Gum (*Liquidambar styraciflua*) will germinate the same season of sowing; while another old writer, I am not certain, but think Philip Miller, flatly contradicts this, satisfied that they will not grow under two years. Succeeding writers have followed the one or the other, according to their own observations or taste; and to this day I am not aware that it is generally known that *both are right* to a certain extent. I might instance many such cases. I could name a man in a Western State, whose business reputation is actually not in the highest standing with some of his eastern acquaintances, because he was unlucky enough to observe that he had no difficulty in raising in the same season Peach trees from stones sown in the spring, without previously cracking them; and yet any man may do the same himself, — he may raise either Sweet Gums, or Peach trees in either one year or two, and yet in either case sow the seed in the spring

of the year. We have only to understand two things; 1st, What preserves the vitality of seeds? 2d, What induces their germination?

The vitality of seeds is an interesting study. There is probably no inherent reason why any kind of seed may not be preserved sound to an indefinite period. Wheat and other cereals which have been taken from Egyptian tombs and monuments, in which they have been enclosed hundreds of years, have readily germinated. In newly plowed up pastures, which have lain unbroken many years, we constantly see myriads of Rag-weed (*Ambrosia artemisiifolia*) springing up from seed, which must have lain dormant during that period. The St. John's wort (*Hipericum perforatum*), Hedge Mustard (*Sisymbrium officinale*) and the Wild Carrot, are also familiar examples, puzzling to many of our farmers, who can scarcely be made to believe that they are not "natural" to the soil, springing spontaneously and unequivocally therefrom. It is recorded that in some countries the *Sinapis arvensis*, a kind of Mustard, most generally springs up in clay taken from very deep wells; and a few years ago I saw it stated in one of our Patent Office Reports, that the Great Yellow Mullein (*Verbascum thapsus*) commonly made its appearance after fires on the prairies. Yet the seeds of all the plants I have mentioned, under ordinary circumstances, germinate in a few weeks, and some of them even in a few days after sowing.

There is another class of seeds, which preserve their vitality to irregular periods, without any extraordinary intervention. The seeds of the Cucumber and Melon will keep fresh so long, that gardeners say the longer they are kept, the better they are; which, if true, would render them of remarkable value by "the end of the world." Nevertheless, they certainly will keep fresh a great many years. The Turnip, the Balsam, or Lady Slipper of Philadelphians, and the Parsley, are instances of easy vitality, though of a few years less than the Gourd tribe; while the Onion, Spinach,

or Lettuce, will seldom germinate over one year.

In all these cases, their preservation is owing to their not being in a position to admit of the mechanical action of heat and moisture in preparing their integuments, or outer coverings, for the chemical action of the elements conducive to germination—an explanation that will be better understood after we examine what induces germination. It will be sufficient here to remark that the vitality of seeds is entirely dependent on this relative position of heat and moisture. Some seeds require more moisture than others to tempt them to germinate; others must be indulged with more heat than water in comparison; but every kind of seed requires its due proportion of each. Seeds of many plants, as the Water Lilies, will only grow in water; and of these, some, as the *Victoria*, must have an accompanying degree of heat of over 70° , while our Yellow Pond Lily will germinate at 55° . Other plants, as the Balsam, *Thunbergia*, *Globe Amaranthus*, &c., will readily grow in comparatively dry soil. In this class the same difference in the required degree of heat is apparent as in the last class; for while the Indian Mallow (*Abrus precatorius*) will not germinate unless accompanied by a heat of over 60° , the garden Speedwells (*Veronica arvensis*, *V. Baerbaumi*, *V. serpyllifolia*, &c.) will readily appear through the soil with the heat anywhere above 25° .

A knowledge of the separate requirements of each seed constitutes practical talent, and this cannot be acquired without extensive experience and observation; but a few principles can be derived from these, which will do much to simplify the labors of those who have to go over the same ground.

I have said that heat and moisture act mechanically in the process of germination, and they do so in this manner: On the application of heat, the pores of the skin are expanded in the outer case or husk of the seed; into these pores moisture is admitted; and then commences the chemical

action which is to effect its germination. An element of the water, which chemists call oxygen, seizes on one of the elements of the husk, carbon, the charcoal principle, and forms a new combination, and disappears in the shape of a gas, carbonic acid, one of the chief sources of food for the young plant as soon as it shall have produced perfect leaves. As soon as the combined force has eaten its way through the husk, it has to perform a similar duty for the "kernel" inside. When this portion of the seed has been in like manner operated upon, it receives its commission to go forth, increase, and multiply, and in short take upon itself all the duties and responsibilities of a living plant.

But you have said nothing about air. Heat, air, and moisture are frequently written of in treatises on germination. What office does air hold in the process? None whatever, my good friend. Air is a positive injury in the case, though of immediate importance directly after the pushing of the embryo. Air, in conjunction with light, hardens the outer coat—chemically speaking, fixes the carbon—which it is the object of germination to destroy. I have no doubt seeds would "swell" in distilled water, though I can think of no direct experiment of the kind just now; but even water plants must send their true leaves to the surface in search of air, immediately after germination.

All these principles teach us that in preserving the vitality of seeds, or in accelerating their germination, a great part of our attention has to be directed to their outer coverings. Seeds cannot lose their vitality while these remain perfect, while they will be in a condition to vegetate whenever this covering is prepared to admit moisture. The different results in the experience of different parties in the time required by certain seeds to grow, is entirely dependent on this. If A preserves his seed during the winter so that the husk becomes hard and bony, while B guards his from such a contingency, the latter will arrive at much more speedy results than the former. Let us

take an example: the Sugar Maple will do. A gathers his at the fall of the leaf, preserves it in a dry seed-room, sows it in the spring, and—it does not come up till twelve months afterwards. But B gathers it at the same time, puts it in the ground at once, and gets fine plants the next season; or he gathers his seeds by the end of August, saves them in a cool room till spring, sows them, and then gets plants also “right away,” in either case getting ahead of his neighbor. “But where is the difference?” Simply that B never allows his seeds to get hard. He places them in the ground to keep their shells soft; or, to the same end, he gathers them, not before their embryos are fully formed, but before their coats have become indurated, and adds to his precaution by keeping them cool till sown. This is a simple experiment, which any one may test for himself.

In successfully raising seed, there is more in this gathering of them before they are what is popularly called quite ripe, than one is at first disposed to admit. I was many years ago struck by this through accident. On a visit to a friend he pointed out what he then considered to be extremely rare, a most beautiful double orange African Marigold. My friend wished to keep it to himself,—he would give no seed, but he presented me with a flower. When this flower was faded, and was cast aside, seeing the seed looked black and good, I saved them, and at the next spring's sowing I sowed them at the same time with the yellow, which we had. They appeared several days before the others. Simple as this was, it led me to ponder on what we garden men had always considered inexplicable, namely, that on sowing Hawthorn seeds, some should come up in one year, while, of the same sowing, some should not appear till the second or third year; and I have since been led to the conclusion, by many similar observations and experiments, that those which came up first were “greener” when gathered, than those which took a longer period.

At the risk of being a little “dreadful” in

long narrations, I will detail a few observations on the *Victoria* seed, which bears well on the present subject. The seeds from England by Mr CORE, and Sir W. J. HOOKER, readily germinated. Those which ripened at Spring brook in September and October the fall following, also readily grew any time through the winter, on being sown for a few weeks. Our plan was flowering all that winter and spring, and in the summer I set myself to collect a good quantity of well-ripened seeds, but they were too fast for me, bursting and sowing themselves. Subsequently I cut one off before it was ripe, or at least before it burst open. These were put in an old wine bottle, and many of those self-sown were placed in another bottle, which chanced to be a white colored one. They were all placed in the same place. Those in the black bottle grew in a few weeks, in the bottle. Looking alone at the known influence of the absence of light in assisting germination I took that to be the cause; but last year the circumstances were repeated in every respect except that the bottles were reversed, and with the same result except that the seeds which grew this time were in the light-colored bottle. This seems confirmatory of what I have advanced in favor of seeds not seemingly ripe; but the *Victoria* still further “confirms this confirmation.” The well ripened seeds, by Mr. CORE's liberality, were distributed over the whole Union; but, with one instance, I believe, excepted, failed to grow. Even in our own tank I could never succeed in raising one of these so-ripened seeds, except in February, March, or April, after they had lain a very long time in pans, and those which were self sown in summer, never appeared any season till the following spring, when they would all appear simultaneously. Last year, warned by these observations, I sowed all the seed in the latter part of the season, and before they were quite ripe, and I am informed that this season no difficulty whatever is experienced in raising seedlings in a few weeks, whenever wanted.

So much for saving seed which we wish to germinate readily. But let it not be forgotten, that if we wish to preserve seed safe and sound, to a remote period, the reverse of this must be aimed at; that is, the riper the seed can be obtained, the better. Now, supposing the seed come to hand dry and hard, perhaps from some foreign country—perhaps old, or perhaps from having been preserved only for a few months in an old coat-pocket, seed chest, or some other dry, warm place,—how are we to proceed? Still look to the softening of its shell. Suppose, for instance, we have a barrel of Peach stones to sow at once some spring, which perchance have been stowed away during the whole winter in the dry store of some dealer. What shall we do; crack them? Yes, that may do, but it is a tedious operation—can't afford so much time; can do for them in a better way than that. Lay them anywhere aside thinly. To-day, with a water-pot, pour boiling water on them; to-morrow let them dry; the next day again pour boiling water on them, as before. Several successive days of this treatment will do. Another way is, expose them any where to a heat of 100°, or thereabout, for a few hours; afterward pour cold water on them; then dry them again. Repeat the operation a few times, and you may easily have Peach trees the same year from stones sown in the spring. We have over a quarter of an acre on our Bethlehem road nursery, from seed sown this spring under the latter process. This mode of softening shells is adapted to any kind of hard, bony seed. The heat expands the pores, the moisture enters, and the work of a whole winter's freezing is effected in a few days.

There are many kinds of seeds which have not exactly "shells" for protection, but which nevertheless get pretty hard coverings, if once allowed to get dry. Many of the sterculiaceae and leguminous plants are of this description. I have seen, of the former tribe, seeds of the Hand plant (*Cheirostemon plantanoides*) remain three years perfectly sound in a pot, resisting every attempt of change of heat and mois-

ture to get them to germinate; when a simple soaking in boiling water for a few hours, on their arrival from Mexico; and for a few hours before sowing, would probably have caused them to spring up in as many days. Boiling water is very efficacious, poured over such seeds, and left thereon a few hours, or where there is any objection to the use of such hot assistants, though I have never found it to hurt anything, the seeds may be steeped for two or three days in cold water. I have raised *Virgilea tuteas* from hard and dry seed in this manner in a few days, after being gathered ten months. Alkalies, acids, and various preparations, have also been used with various success in softening the integuments of seeds. I do not myself value any of these means much, believing as I do that a proper and judicious employment of heat and moisture is abundantly sufficient for every purpose.

I think I could add much more of interest on this interesting subject, but the intense heat and my numerous engagements make me feel that I have said enough for once; and I venture a guess, on looking over my pages, that the editor himself will have good cause for coming to the same conclusion. I will therefore finish by recapitulating, that seeds may be preserved to any length of time, "safe and sound," by so regulating heat that it shall not abstract the moisture from the outer coat and so regulating moisture that it shall not rot it; and that seeds may be made to grow at any time, by so gathering and preserving them that the outer covering never becomes absolutely hard; or, if once become hard, employing variations of heat and moisture to soften it.

THE ZOUAVES.—Many of our readers who have seen this term in connection with the French forces in the East, will no doubt be interested in the following answer to an inquiry as to the meaning of the word, from the *London Notes on Queries*:—"The Zouaves are natives of the French provinces of Algiers, disciplined and exercised by French officers, and now forming part of the French contingent employed in the Crimean and siege of Sevastopol. They hold exactly the same relation to the French army that the Sepoys of India have to regular British troops."

What can be done in a Garden.

Thirty years ago I purchased an establishment, consisting of a dwelling house, barn carriage and wood-house, calculating to make it a permanent residence. There was attached a little land for a garden, on which were just five apple trees, and in front of the house were three trees of the Balm of Gilead; the trees were all about six inches in diameter at that time; but two of the Apple trees were hollow, and I cut one of them down, after trying to make it do something and finding I could not.

Well, all the Apple trees bore something for fruit, but so crabbed and sour they would make a pig squeal. At this time I was engaged as a trader, and had a country store to look after, which occupied about all my time; but, as time went on, and stage coaches and railroad cars succeeded one another, I had more time, for I can now travel as far in four hours as I could then in two entire days with my team. Well, for amusement, I grafted all the four gradually, or year by year, cutting off the old branches, and grafting the limbs with *Roxbury Russets*, *New York Russets*, *Baldwins*, &c., &c., all the best I could find. Now for results: I have had about ten barrels of good apples, annually, to put up for winter for three or four years past, besides all we used, in the family of five, and we have used them freely all we wanted, till time to gather the winter apples.

I have a yard in front of my house, about forty feet square, in front of which are two of the Balm of Gilead trees before mentioned, which are now large trees, and have been left outside of the front fence; but inside of the fence I set out, about ten years ago, three Pear trees, of the common summer pear, which now give us all the pears we want; for they have borne well for about four years. From the pear trees to the house, I filled the space with flower-beds, and have had many varieties, say twenty kinds of roses, and nearly one hundred kinds of other flowers. I have planted on the south side of my buildings, next to the passage to the barn, Plums, Peaches and Grapes. The Peaches have not succeeded well, nor the Plums, so I cut the Plum trees off, and grafted them with the *Green* and *Purple Gage*, only three or four years ago, and now I have plenty of the finest plums I ever saw, so that I have to prop the small branches. My Grapes began to bear last year; I had about a bushel, and I should think about double the quantity this year. I have set out some Quince trees, but they do not bear yet.

Besides the trees and Grape vines, I have raised about ten or fifteen bushels of potatoes, six or seven bushels of beets and carrots, some English turnips and ruta bagas, and a few

cabbages and onions, as many as our folks wanted to use. We have also had beans, peas and corn, what we wanted to use green; and I have annually had about three or four bushels of dry corn, say two bushels of common yellow corn, one bushel of pop corn, and sweet corn enough to plant myself and supply all my neighbors. Also, I have annually raised cucumbers, water and musk melons, summer and winter squashes, one or two hundred or one thousand pounds of pumpkins. All this has been raised on less than half an acre of ground, including buildings and drive way;—and I have had more vegetables for years in my family than some men that cultivate one hundred acres—and all on poor, gravelly New Hampshire land, without any help from my girls in the flower department. And as Goldsmith says, "we make every rod of ground support its man."—*Correspondent of the N. E. Farmer.*

Planting Fruit Trees.

Jock, when you have nothing else to do you may be eye sticking in a tree; it will be growing, Jock, when ye're asleep.—*Heart of Midlothian.*

1. Would you leave an inheritance to your children? Plant orchard. No other investment of money and labor will, in the long run, pay so well.

2. Would you make home pleasant—the abode of social virtue? Plant an orchard. Nothing better promotes, among our neighbors, a feeling of kindness and good will than a treat of good fruits, often repeated.

3. Would you remove from your children the strongest temptations to steal? Plant an orchard. If children cannot obtain fruit at home they are apt to steal it; and when they have learned to steal fruit, they are in a fair way to learn to steal horses.

4. Would you cultivate a constant feeling of thankfulness toward the great Giver of all good? Plant an orchard. By having constantly before you the greatest blessings given to man, you must be hardened indeed if you are not influenced by a spirit of humanity and of thankfulness.

5. Would you have your children love their home, respect their parents while living and venerate their memory when dead, in all their wanderings look back upon the home of their youth as a sacred spot—an oasis in the great wilderness of life? Then plant an orchard.

6. In short, if you wish to avail yourself of the blessings of a bountiful Providence which are within your reach, you must plant an orchard. Don't plant crab-apple trees, nor wild plums, nor Indian peaches.

The best are the cheapest.—*American Cotton Planter.*

How to Raise Melons.

As I have been accustomed to raising melons every year ever since I was a little boy, I deem it proper to say a few words on that subject. In the first place fence off your ground in two or three lots, as large as you want them, so you can change from lot to lot every year; and second, take one of these lots for what we call cow-pens, and pen your cows on it every night through the summer season, in order to make the ground rich, but keep them off in the winter so the ground may become mellow before spring.

After you have taken your cows off take a hoe and scrape up a pile of the manure (to keep it from losing its strength) about as large as you think will allow a good-sized shovel full to each hill. Before plowing, go over the lot and mash the manure up fine, scattering it all over the ground. Plow it tolerably early about six or seven inches deep, and let it lay till time for planting. About the time you want to plant, plow it the second time about the same depth, turning the manure on the top; harrow it well in order to mash the clods. Furrow it out about eight or nine feet each way, with a shovel-plow. Then take a shovel-full of the manure, above named, and put right in the cross, then make your hills stirring dirt and manure together, then you are ready for planting. Put in plenty of seed in order to save replanting if possible. Keep them perfectly clean by tending with hoe and three-shoveled cultivator. If they come up right and it is a good season, and well tended, I will insure a good crop of melons.

ELKHORN FARM.

The White Elm.

In a "Walk among Trees," by Rev. H. W. Beecher, of the *Independent*, he thus speaks of one of the most beautiful as well as most common of trees—the pasture Elm. In the fields of our early home stands one such—but not fixed there more firmly than it is in our memory—not a greater blessing to the flocks and herds than to him who so seldom may look upon it, sheltering and clustering around it so many pleasant thoughts and recollections.—*Moore's Rural New Yorker*.

First in our regard, as it is first in the whole nobility of trees, stands the white elm; no less esteemed because it is an American tree, known abroad only by importation, and never seen in all its magnificence, except in our own valleys. The old oaks of England are very excellent in their way, gnarled and rugged. The elm has strength as significant as they, and a grace, a royalty, which leaves the oak like a boor in comparison. Had the elm been an English tree, and had Chaucer seen and loved and sung it, and even Shakspeare, and

every English poet hung some garlands upon it, it would have lifted up its head now, not only the noblest of all growing things, but enshrined in a thousand rich associations of history and literature.

If it be given to a tree to stand out where the east and the west, the north and the south all look at it at fancy, and each gives its gifts of beauty, rounding it up into a mighty tower of strength, so let it stand to tell the world what God thought of when he first thought of a tree!

Thus do ye stand noble elms! Lifted up so high are your topmost boughs, that no indolent bird care to seek you, and only those nimble wings, and they with unwonted heat, that love exertion, and aspire to sing where none sing higher Aspiration! So Heaven gives it pure as flames to the noble bosom. But debased with passion and selfishness it comes to be only Ambition!

It was in the presence of this pasture-elm, which we name the queen, that we felt to our very marrow, that we had indeed become owners of the soil! It was with a feeling of awe that we looked up into its face, and when I whispered to myself, this is mine, there was a shrinking as if there were sacrifice in the very thought of property in such a creature of God as this cathedral-topped tree. Does a man bare his head in some old church? So did I, standing in the shadow of this regal tree, and looking up into that completed story, at which tree hundred years have been at work with noiseless fingers! What was I in its presence but a grasshopper? My heart said, "I may not call these property, and that property mine! Thou belongest to the air. Thou art the child of summer. Thou art the mighty temple where birds praise God. Thou belongest to no man's hand, but to all men's eyes that do love beauty, and that have learned through beauty to behold God! Stand, then, in thine own beauty and grandeur! I shall be a lover and protector to keep drouth from thy roots, and the axe from thy trunk."

Leguminous Plants.

Leguminous plants are those of the pulse tribe, and include peas, beans, taras, clover, lucerne, sainfoin &c., of the class diadelphous and other decandria.

The formation of the roots of leguminous vegetables varies much. The pea, for instance, has numerous small roots, all issuing from the seed, like under-set of the roots of culmiferous plants (wheat, barley, oats, &c.) the red clover has a strong tap root.

The essential difference—as regards the effect upon the soil—between leguminous and culmiferous plants, is that the former derive

much of their aliment from the air, through their leaves, while the other, having small and few leaves, depend chiefly upon the soil for their nourishment; and as culmiferous plants are chiefly cultivated for their seed, and are not cut until fully ripe, they are decidedly of an exhausting nature—but if cut green for fodder, they do not weaken the vigor of the soil, more than many leguminous plants. Bearing this distinctive principle in mind, it follows, as a necessary deduction, that leguminous plants weaken the land, more or less, according as they ripen their seeds or not. Peas and beans being grown for seed, are more severe than other leguminous crops cut green. But whether they ripen the seed or not, they are all, in one respect, highly conducive to the frailty and mellowness of the soil; by the shading which their foliage affords, the dew or the rain which falls in summer, is greatly prevented from evaporating; much of the moisture sinks into the soil, which becomes mellow and unctious in consequence. But moisture falling on a culmiferous crop rests for a moment on the surface, and is then evaporated by the influence of the sun, leaving the ground not only dry but hard. And further, some of the leguminous tribe, by pushing their roots widely and deeply in the ground, loosen it more than others, and are, of course, in this respect, more beneficial than others, though, in respect of abstracting aliment, they may be more injurious. Red clover by its tap-root divides the earth more than any mere fibrous-rooted plant; and when it does not mature its seed, is on clay soil the very best aperient, as it tends to remove cohesiveness without exhausting. In a word, leguminous plants, if not allowed to ripen, deprive the soil in a very trifling degree of nourishment, while they invariably loosen it, and prepare it best for those culmiferous plants, which are perhaps more profitable, to succeed in their proper turn, and which tend to bind up the land again, and thus preserve the happy medium of fertility.

THE PEAR.—We have seen some statements by horticulturists that the pear fails in our State because they are planted out on our level lands and the top roots run down into the earth always saturated with water. To this cause is attributed the blight and other diseases which destroy the tree.

Now we have on the bluffs of our creeks and rivers grounds that would not be obnoxious to this objection. The roots of the trees would not stand in soil saturated with water, and the soil is sufficiently rich to produce a healthy growth. Who has ever tried the pear on these bluffs and hills?

We have seen, too, particular descriptions

of the proper method of ripening the pear. Few of the varieties ripen well on the trees. But we are of opinion that it would be well to watch the dolphin before we put ourselves to the trouble of cooking him," and equally as proper to be able to raise good crops of pears before we are at very great trouble to learn the improved manner of ripening them.

Among many farmers and others there is a disinclination to make any attempts to cultivate the pear tree. Few pear trees from nurseries have been set out in orchards or gardens for the three last years in this region. We think, however, that the culture of the pear should not be neglected. We have a variety of soils and situations in the country, and they should all be tried. We have faith to believe that some varieties of the pear will be found that will succeed well here on grounds suited on to them,—some of which can be found almost every farm.—*Illinois Journal.*

Agriculture in Schools.

Most of us remember how dull and destitute of interest were our school studies. We learned geography, perhaps, with satisfaction, because we were obtaining what we considered truths which would benefit in us after time. We "cyphered" to the "Rule of Three"—scarcely beyond—because we conceived the idea that that alone would qualify us to transact the common business of life, without once reflecting how far from practical were the problems given us to solve. If we studied grammar, it was not for the love of it, but because we honestly believed that it made us "speak and write the English language correctly." And how often have we been forced to read in the old English Reader, or some other equally stupid text book, which we could not understand, and which would render us but little benefit, even under a full apprehension of its meaning. The truth is, one half of the men and women of New Hampshire took little or no pleasure in the studies of their school days. There was an unvaried routine, day after day. To go over a certain amount satisfied a majority. To understand and apply what was assigned, was most distant from their thoughts.

Though schools at the present day have greatly improved, in many respects, yet there still exists this hereditary fault. There is no interest manifested because, too often, there is no tangible meaning to the lessons assigned, or they are beyond the comprehension of the learner. The pupil cannot see their applicability. Teachers perceive the fault,—they know it is not easy to engage the mind of the pupil. And a good instructor understands the reason.

This being so, what shall be the remedy?

Our plan would be to change the character of our school books and of the instruction given, so that it would not be so dry and dull.

The objector at once meets with the fact that books have been simplified and improved to such a degree that there is no room for further improvements.

We understand it. We are not ignorant of the vast improvement which has been made within comparatively a few years. But they have not all been improved in the right way. There is still a deficiency. There is too much technicality about them—too many rules, too much lumber, and too little practicability in them. We would have them so written as to apply more directly to the common affairs of life—to commerce, to trade, the mechanic arts, architecture, domestic economy, &c. We know this is not possible in every branch, but in a great measure it is not only possible, but quite easy. Every science has some practical, useful application, and when that science is studied, why should not its application constitute a part of the study?

Let us apply our idea to one branch of useful knowledge, that of agriculture. We need a more thorough knowledge of the principles of agriculture, and practical application of the sciences on which it is based. As a people we are exceedingly ignorant of agricultural facts. We do not understand why a certain piece of ground will produce one kind of vegetation and afford no support to another. We cannot tell why one description of manure will double a growth of corn, while another will produce no visible effect. And there are a thousand just such mysteries in nature which are beyond our power to explain. To be sure many of them are known to some men—but not to the mass. Now what we want is, to place the reasons of these things before the mind of the scholar in such a manner as will induce him to consider them. Let him see the reason for any change that is produced in nature, and he will soon learn to remember that fact, and to search out others to increase his knowledge.

It would have our reading books made up of that class of articles which, while they present a great variety of style, would contain practical information. There has now been so much written and spoken on the subject of agriculture that a choice selection might be made. The strongest minds, the most gifted intellects, have been exercised in this department; most eloquent addresses have been delivered on this subject. There is no dearth of material for a splendid selection of agricultural reading adapted to the scholars in our common schools and academies. We have now in our mind, a work by Dr. Blake,

well adapted to the wants of schools in this respect—a book full of interest and instruction.

Our mathematical studies might be so arranged as to afford practical instruction, while their efficiency in disciplining the mind would not be diminished in the least. One of the best Arithmetics within our knowledge, has a few chapters on this plan, which are given under the heads of the "Farm," the "Garden," the "Household," the "Road," &c. It is too difficult a work for common district school scholars, but it serves as a model for one requiring less effort and qualification to master. It is a recent work by Horace Mann and Phin E. Chase.

So in Chemistry, Philosophy and other studies—there is no difficulty in making them practical.

We need not say more on this subject at present. We only desire to call attention to it, that it may receive a candid consideration by the public. We hope farmers will think of it, and discuss it. Let it be a topic for debate in district lyceums, in Farmers' clubs, and in agricultural societies, whenever they meet for discussion.

WHERE CORK COMES FROM.—Cork is nothing more or less than the bark of evergreen oak, growing principally in Spain, and other countries bordering the Mediterranean; in English gardens it is only a curiosity. When the cork tree is about fifteen years old, the bark has attained a thickness and quality suitable for manufacturing purposes, and after stripping, a further growth of eight years produces a second crop, and so on at intervals, for seven or twelve crops. The bark is stripped from the tree in pieces two inches in thickness, of considerable length, and of such width as to retain the curved form of the trunk when it has been stripped. The bark peeler or gutter makes a slit in the bark with a knife, perpendicularly from the top of the trunk to the bottom; he makes another incision parallel to it, and at some distance from the former, and two shorter horizontal cuts at the top and bottom. For stripping off the piece thus isolated, he uses a kind of knife with two handles, and a curved blade. Sometimes, after the cuts have been made, he leaves the tree to throw off the bark by the spontaneous action of the vegetation within the trunk. The detached pieces are soaked in water, and are placed over a fire when nearly dry; they are, in fact, scorched a little on both sides, and acquire a somewhat more compact texture by this scorching. In order to get rid of the curvature, and bring them flat, they are pressed down with weights, while yet hot, and

The Family Circle.

Conducted by
Mrs. MARY ABBOTT.

Encouraging.

We are greatly encouraged by the many kind and approving words which come in so many of the letters received. We are glad that our endeavors to benefit the family circle are appreciated. It is our wish, to be in some degree, the means of good to the domestic circle—that circle, which, if trained and educated properly, comes nearer the society of heaven than any other. If we can help to make the homes what they ought to be, then we shall know that we have not labored in vain; and it gratifies us to think that our humble efforts are not altogether useless.

When the Valley Farmer first commenced its career, we did not start our department with a view to gain one subscriber by it, that we did not think of, but we thought we would devote a few extra pages to the family circle, willing to throw in our own feeble efforts—hoping that they might do some good; and we feel fully paid, by the manner in which our exertions have been received; and by the many kind wishes for our long life and welfare, which our friends express.

The Father at Home.

As we write for the family circle, we write for fathers as well as mothers, and we hope that no father will take it amiss that we include him in the Family Circle. Much has been said upon the duties of mothers and their great responsibility, but little is said, by modern writers, of the duties of fathers in training their children; on this subject, they are generally silent. It is supposed, that if they care for the temporal wants of their family, it is all that is required of them, and the whole duty of training the family, intellectually and spiritually, in many cases, rests entirely upon the mother; but God thought not so; He says, "I know Abraham, that he will command his household after him," and Saint Paul said, that

a man to hold the office of a deacon, should know how to "order his children." We should infer, that no man ought to hold offices of trust and responsibility, who did not morally, intellectually, and religiously train his household.

The father can do much to educate his children, and interest his whole family these long winter evenings. Winter evenings are of great benefit to the domestic circle; they serve to bind the whole family in unity and love; they make the father the principal one in the family group. An affectionate husband and father is looked up to with the greatest confidence; the comfort of all seems to depend upon him. At the close of day, see how the wife and children listen for his coming foot-steps, and when the cheerful and good father enters, how eager each little one is to see his smile and gain the first kiss. The wife also cheerfully and willingly welcomes him—and as he is so much loved and esteemed, how great can be his influence for good to those he loves! And now, these winter evenings, improve the time, and educate the minds and hearts of the children. God has committed to your care, and in doing this duty you will make yourselves happy, and confer blessings upon your family that will last as long as eternity shall last. You sow good seed that you may reap a good harvest; and be sure that you sow good seed in the hearts of your children, for whatsoever ye sow, that shall ye also reap.

Husband.

The husband is the house-band or organizer of the household. If education has disciplined his mind and refined his tastes; if the town meeting has awakened in him an exalted sense of citizenship; if the Church has lifted his heart into communion with the Father of families, and inspired him with those generous and noble sentiments that exalt our nature; he will not be content to live a drudging, dullard life at home, to play the petty tyrant in the political economy of the kitchen and parlor, or be worse than an infidel by not providing for his own.

A good husband will organize his family, by introducing not only the home-bred affections and moralities that sweeten life, but also the refinements and amenities that adorn it.

The former may exist in the barbarian's hut—the latter are the beauty and charm of a Christian home.

The husband owes it to himself and to his family to make his home attractive and beautiful as well as comfortable.

"The delicate angel of the Beautiful knocks at your door and begs admission, as well as the strong angel of the Useful. Is there the fine eloquence of order, is there the disposing touch of taste, is there the simple and just adorning touch of nature round all your door-stones, in all your front lawns, on the walls and tables and furnishing of your dwellings? How many hours of a spring would it take to embower your windows with all that is graceful in green foliage and winning in floral splendor? Plant trees before you purchase Venetian blinds and paint-pickets. You will carry a tenderer, and therefore a manlier, heart in your breast all day, if you pass out of a genial circle through the fragrance of lilies, and roses, and honeysuckles. See that the sons and daughters are interlaced by bands more spiritual than gregarious bipeds. Let the harmonies of evening music weave their souls into some gentle and lofty sympathies, gaining the boys from their ruder pleasures and doubtful companionship by the preoccupying satisfaction of a cheerful, courteous and hospitable fireside. Starve your palate, if need ever were for such denial, to stock your library. Raise the tone of farm-house table-talk if you can—and let the ladies help—above state gossip, commonplace of day's work and scandalous tattle. Household life is not to unfold into grace and moral loveliness by accident, any more than the wealth of your garden or orchard. It must be cultivated. And I take it, Christianity speaks of that higher kind of economy as much as of butcher's meat and breadstuffs, when it pronounces him that provideth not for his own worse than an infidel."

Educating Children.

The education of our children is now more than ever a puzzling problem, if by education we mean the development of the whole humanity, not merely of some arbitrary chosen part of it. How to feed the imagination with wholesome food, and teach it to despise French novels, and that engendered slough of sentimental poetry, in comparison with which the old fairy tales and ballads were manful and rational; how to counteract the tendency to shallow and conceited socialism, engendered by hearing popular lectures on all manner of subjects, which can only be really learnt by stern methodic study; how to give habits of enterprise, patience, accurate observation, which the counting-house or the library will never bestow; above all, how to develop the

physical powers, without engendering brutality and coarseness, are questions becoming daily more and more puzzling, while they need daily more and more to be solved, in an age of enterprise, travel and emigration, like the present. For the truth must be told, that the great majority of men who are now distinguished by commercial success, have had a training the directly opposite to that which they are giving their sons.

They are for the most part men who have migrated from the country to the town, and had in their youth all the advantages of a sturdy and manful hill-side or sea-side training, whose bodies were developed, and their lungs fed on pure breezes, long before they brought to work in the city the bodily and mental strength which they had gained by loch and moor. But it is not so with their sons. Their business habits are learnt in the counting-house; a good school, doubtless, as far as it goes; but one which will expand none but the lowest intellectual faculties; which will make them accurate accountants, shrewd computers, but never the originators of daring schemes, men able and willing to go forth to replenish the earth and subdue it. And in the hours of relaxation, how much of their time is thrown away for anything better, on frivolity, not to say secret profligacy, parents know too well; and often shut their eyes in very despair to evils which they know not how to cure. A frightful majority of our middle class young men are growing up effeminate, empty of all knowledge but that which tends directly to the making of a fortune; or rather, to speak correctly, to the fortunes their fathers made for them.

THE LITTLE ONES.—Two little girls, one rejoicing in blue ribbons, and the other in pink, were bawling their domestic misfortunes in mock maternal language.

"Where is your dolly?" asked pink ribbons of her little neighbor.

"Dear me, didn't I tell you?" answered blue; "why, she's got the measles dreadfully. Her face is spotted all over."

"Well, I don't think she's as sick as my dolly," said pink; "only think, I've had a constitution of thirty doctors for her, and they all didn't do her any good. I've had to buy her a new gown, she's so miserable, and not the first misery a new gown has brightened up—she's got consumption."

"O, that's dreadful bad! Does she cough much?" asked the other, with an air of great solicitude.

"All the time—and keeps me awake very much at night."

"But why don't you take her out? The air will be good for her lungs."

"O, dear!" exclaimed pink ribbons, with an admirably assumed intensity of feeling, "my dolly hasn't got a bit of lungs, she only breathes through her nose."
This was the climax. Who could help laughing?

"SCRAPPLE."—I observe a call for a recipe for making "Scrapple," and some other homely dishes. Here is one that has been a favorite, with two generations:

Boil two or three pig's "faces," a liver, chine bones, &c., (or omit the liver, if you choose,) till the meat comes off the bones and will pick to pieces readily. Take out the meat, and half thicken the liquid with Indian meal, which allow to boil, whilst you pick the meat off the bones, and chop the liver fine; then return the meat, &c., into the pot, and stir in buckwheat flour, till it is thick as mush. This done, season the mixture with pepper, salt and powdered sage, and put it into pans to cool. Next morning, fry it brown in slices, and see if your children will not decide that the "waste is the best after all."—*E., Wellsboro' Pa., Feb. 5, 1855.*

"WASHING RECIPE."—The following recipe has been peddled through the country, and sold for \$1. It saves one-third of the labor of washing:—Take one lb. of saltpetre, and dissolve it in one gallon of cold rainwater, and cork it up in some tight vessel. When you are going to wash, add three large spoonfuls to each pint of soap; make a suds with this, and soak the clothes 20 or 30 minutes; then rub them out, and put them over the fire in a clean cold suds. Let them come to the boil, and boil five minutes; then take them out and rinse them.—*Ohio Cultivator.*

"MINT SAUCE."—Many of our country friends do not know what a luxury they deprive themselves of, when they eat lamb either boiled or baked without mint sauce. Set a few roots of spearmint in one corner of the garden, and they will soon furnish an abundant supply. Strip off the leaves and chop them fine, add an equal amount of sugar, and cover the whole with vinegar. A small tea-cupfull of the mixture is sufficient for a large family. Try this, and see if it is not preferable to greasy gravies.—*Ohio Cultivator.*

"TO CURE EARACHE."—Earache may be relieved by dropping a little sweet oil and laudanum, warm, into the ear, and applying hot salt in flannel bags, so as to keep the part constantly warm.

"SOAP."—When preparing to make soap, add a little old soap to the lye and grease. This will greatly facilitate the labor of the making.

A GOOD SALVE.—A friend who has tried it gives us the following receipt: Boil hainlook bark until you obtain its strength, then strain the liquor and evaporate down to the consistency of molasses; to this add an equal part of lard. This is valuable for chapped hands, lips, &c.—*Maine Farmer.*

A GOOD JOHNNY CAKE.—Three cups of meal two cups of sour milk, one cup of cream, one egg, one half-teaspoon of saleratus, and a little salt.

HOW TO DO UP SHIRT-BOSOMS.—We often hear ladies expressing a wish to know by what process the gloss on new linens, shirt bosoms etc., is produced, and in order to gratify them we subjoin the following recipe:

"Take two ounces of fine white gum arabic powder—put it in a pitcher, and pour on a pint or more of boiling water, according to the degree of strength you desire—and then having covered it, let it stand all night—in the morning pour it carefully from the dregs into a clean bottle, cork it and keep it for use. A tablespoonful of gum water stirred into a pint of starch made in the usual manner, will give to lawn, either white or printed, a look of newness, when nothing else can restore them after they have been washed.

WASH FOR THE HAIR.—Olive oil, half an ounce; oil of rosemary, on draught; strong hartshorn, two drachms rose-water, half a pint. Add the rose-water by degrees, otherwise it will not amalgamate.

VEGETABLE SEASONERS.—Parsley, celery, thyme, sage, onions, garlic, and other seasoners, should not be put into soups or stews until the soup is nearly done; chop fine, and put in five minutes before the soup is taken from the fire.

TO CLEAR COFFEE.—When nothing else can be obtained, mix a little lutan mean with the coffee before putting it to boil.—*Ohio Cult.*

CHEAP LEMON FLAVOR.—When lemons are plenty, procure a quantity, cut them into thin slices, and lay them on plates to dry in the oven; when dry put them into a tight bag, or close vessel, in the store-room, where they are both handy and agreeable for almost any thing.

SQUASH PIE'S WITHOUT EGGS.—To make the best of squash pies (when eggs are 25 to 50 cents per dozen) use none, but put in the place of them soft crackers powdered fine. Just advertise that for the rest of the poor folks.

The Garden of Adam and Eve.

A very, O very long time ago,
When first God made the flowers,
There was only one man and one woman you know,
In this wide, large world of ours.
They lived in a garden full of trees,
And the boughs were bright with bloom,
And laden with fruit, and alive with bees,
Yet the birds had plenty of room.

There were birds of orange, and red, and brown,
And green, and gold, and blue,
They ate the seeds that the breeze blew down,
And drank from the drops of dew.

And the little white lambs lay down and dreamed,
Where the clover started out;
And the purple and golden butterflies seemed
Like flowers that floated about.

And the rich rare roses grew there tall,
And sweeter than you can think,
And a beautiful river ran through all,
Where the sad deer came to drink.

And everything was happy and gay,
With nothing to harm or grieve,
And the Lord God came in the cool of the day,
And talked with the man and Eve. [Little Pilgrim.]

About the Management of Children.

It is a quite a mistake to suppose that children love parents less who maintain a proper authority over them. On the contrary, they respect them more. It is a cruel and unnatural selfishness that indulges children in a foolish and hurtful way. Parents are guides and counsellors to their children. As a guide in a foreign land, they undertake to pilot them safely through the shoals and quicksands of experience. If the guide allow his followers all the liberty they please—if, because they dislike the constraint of the narrow path of safety, he allow them to stray into holes and down precipices that destroy them, to loiter into woods full of wild beasts or deadly herbs—our be he called a sure guide? And is it not the same with our children? They are as yet only in the preface, or, as it were, in the first chapter of the book of life. We have nearly finished it, or are advanced. We must open the pages for these younger minds. If children see that their parents act from principle; that they do not find fault without reason; that they do not punish because personal offence is taken, but because the thing in itself is wrong—if they see that, while they are resolutely but affectionately refused what is not good for them, there is a willingness to oblige them in all innocent matters—they will soon appreciate such conduct. If no attention is paid to rational wishes; if no allowance is made for youthful spirits; if they are dealt with in a hard and unsympathizing manner, the proud spirit will rebel, and the meek spirit be broken. Our stooping to amuse them, our condescending to make ourselves one in their plays and pleasures at suitable times, will lead them to know that it is not because

we will not, but because we cannot attend to them, that at other times we refuse to do so. A part or improper way of speaking ought never to be allowed. Clever children are very apt to be pert, and, if too much admired for it and laughed at, become eccentric and disagreeable. It is often very difficult to check our own amusements, but their future welfare should be regarded more than our present entertainment. It should never be forgotten that they are tender plants committed to our fostering care; that that every thoughtless word or careless neglect may destroy a germ of immortality; "that foolishness is bound up in the heart of a child;" and that we must ever, like watchful husbandmen, be on our guard against it. It is indeed little that we can do in our own strength; but if we are conscientious performers of our part—if we earnestly commend them in faith and prayer to the fostering care of their Father in heaven, to the tender love of Him, the Angel of whose presence goes before them, and who carries the lambs in his bosom—we may then go on our way rejoicing; for "He will never leave or forsake those who trust in Him."

INFLUENCE OF WOMEN.—Senator Houston was once asked, at a large party given by Mr. Speaker Winthrop, why he did not attend the usual places of public amusement, as he had been accustomed to do. His reply was this—let it be read and remembered by the mothers and daughters of America.

"I make it a point," said the honorable Senator, "never to visit a place where my lady, if she were with me, would be unwilling to go. I know it would give her pain, as a Christian to attend such places, and I will not go myself where I could not take my wife."

A member of Congress, who was present, alluded to his own wife, and added that there was a mutual understanding between him and her, that they should each follow the bent of their own inclinations in such matters.

"That may do for you," responded Mr. Houston, "but with me it is different from what it is with many men. My wife has been the making of me. She took me when I was the victim of slavish appetites; she has redeemed and regenerated me, and I will not do that in her absence which I know would give her pain if she were present."

Mr. Houston is a member of the Baptist Church, and is a native of Alabama.—*Western Christian Advocate.*

Kind Words.—Life is not all sunshine; clouds will sometimes obscure the sun upon the brightest day, and storms will often gather, when the sky seems serene. So when life seems most joyous, and our path seems covered with naught

but flowers, clouds of melancholy will sometimes rise in spite of all our efforts. An unkind word from those we love will lacerate the feelings more than the harshest rebuke from an enemy. Kind words cost nothing, and they fall upon the feelings like snow flakes upon the earth, bright and still, calming the spirit of wrath or healing the broken heart. As the gentle, refreshing shower will reanimate nature, causing the fields to glow with a brighter green, and the flowers to bloom with a lovelier hue, so kind words, breathed in gentle tones, will revive the drooping spirit and makes life seem brighter and happier. As the tornado spreads ruin in its track, leveling the labor of years to the earth in an hour, so unkind and angry words will rouse the passions to a storm, destroying the tender feelings or crushing the gentle spirit. Then if angry thoughts fill the mind and angry words are rising on the tongue, which if uttered will needlessly lacerate the feelings of some friend; check them, for once uttered they cannot be recalled, and will rest on your own mind, causing there the same sorrow they have carried elsewhere.—*Country Gentleman.*

The Sense of Justice.

The boys attending one of our public schools, of the average age of seven years, had, in their play of bat and ball, broken one of the neighbor's windows; but no one knew of the offender could be obtained, as he would not confess, nor would any of his associates expose him.

The case troubled the governess, and on the occasion of a gentleman visiting the school, she privately and briefly stated the circumstance, and wished him, in some remarks to the school, to advert to the principle involved in the case.

The address to the school had reference, principally, to the conduct of boys in the streets and in their sports. The principles of rectitude and kindness which should govern them everywhere—even when alone, and when they thought no eye could see, and there was no one present to observe. The school seemed deeply interested in the remarks.

A very short time after the visitor left the school, a little boy arose in his seat, and said: "Miss L——, I batted the ball that broke Mr. —'s window. Another boy threw the ball, but I batted it and struck the window. I am willing to pay for it."

There was a death-like silence in the school as the boy was speaking, and it continued after he had closed.

"But it won't be right for—to pay the whole for the glass," said another boy rising from his seat; "all of us that were playing should pay something, because we were all

engaged alike in the play; I'll pay my part!"

"And I," said another boy, "I'll pay my part!"

A thrill of pleasure seemed to run through the school at this display of correct feeling. The teacher's heart was touched, and she felt more than ever the responsibility of her charge.

Will The Lord Make Me Over Again.

Far up toward the mouth of the Mississippi River in Minnesota, is a place called St. Anthony. Along the banks of this river, in that region, are many high banks or hills, called bluffs.

It is amid these scenes that Jabez lives. He is a little boy about five years of age, and has a little brother, younger than himself, whose name is Martin. One of these bluffs or hills, near their home, is about sixty feet high.

One day, last summer, Jabez thought he would climb to the top of this. His little brother attempted to follow, for he wished to do whatever he saw Jabez do.

This bluff was very steep, and when Martin saw Jabez at the top, and himself half way up and alone, he became frightened, and began to call his brother to come down and help him. Jabez started to go down, when his foot slipped and he slid to the bottom, over the loose stones.

The mother ran to the relief of the venture: some boys, and found Jabez badly bruised, though not seriously injured. She asked him what he thought when he was tumbling over the stones.

"Oh," said he, "I thought I should almost break my neck; but would not the Lord have made me over again if I had been killed?"

"No," replied his mother; "if you had been killed by the fall, I should have had no little Jabez—the Lord would not have made you over again." On hearing this he looked very sad and thoughtful; promised his mother that he would be more careful in future, and try to avoid dangerous places.

This, my young friends, is a true story, and I wish you to learn a lesson from it. You, my reader, are now climbing the great bluff of life. You have commenced learning lessons of usefulness. All these can be mastered, step by step, and the summit may be attained by constant perseverance. But if you look idly around you, or loiter by the way, you may lose your footing. If you form bad habits, such as lying, swearing, or playing with bad boys, you may, like Jabez, fall down the bluff, bruised and lame.

Be honest, truthful, and faithful, and earnest to gain the honors and rewards of the persevering student, and your footing will be safe; but if you stoop to idleness, mean, dis-

honest acts, you may fail to attain the bright rewards. If you neglect to learn to do right, and to get a good education while young, you must always do without it. "The Lord will not make your over again."

Only once are the golden opportunities given you to cultivate your mind. If you do not improve these, you will lose your footing on the bluff of life. No, said thought! Opportunities wasted—a youth-time squandered in idleness or the pursuit of vain pleasures, and it is lost forever. "The Lord will not make you over again."

A CARD.

Dr. Calvin M. Fitch, of New York.
Will be at the Virginia Hotel, St. Louis, Mo., from Monday, February 12 to until Tuesday, April 10th 1885, where he may be consulted daily, at his rooms, for **PULMONARY CONSUMPTION, ASTHMA**, and other diseases of the chest. Also, for Catarrh, Bronchitis, Dyspepsia, Female Complaints, and all other diseases connected with or predisposing to Consumption, to which he has not particularly devoted his attention, and in the treatment of which he has met with marked success.
Dr. Fitch desires to see his patients personally in every instance where it is possible; where it is not, a careful statement of the case may be sent by letter, to which a prompt reply will be returned, giving his opinion of the case and when he is willing to undertake the treatment, will state the expense of the remedial regime.

LIVE STOCK MARKET.

BELLEVUE HOUSE, Saturday, Feb. 17.
CATTLE—Lennox, of Miller county, sold 39 head of steers at 6 1-2c net—Mophit, of St. Clair county, Ill., sold 17 head do at 4 3-4c 35 per head—John Finn, St. Louis county, 16 head at 7 1-2c net; 14 do at 7c net, 6 milch cows at 26c per head—Kendall, of Franklin county, 17 steers at \$38 each—Amos Cardin, Polaski county, 38 steers at 7c net—Thos. Brooks, of St. Louis county, 8 steers at 7c net—Magrath, 12 steers at 7 1-2c net.
SHEEP—Hodge, of Franklin county, sold 42 head at \$2 50 per head.

WEDGE HOUSE, February 17.

CATTLE—L. M. Draw, of Franklin county, Mo., sold 23 at 7 1-2c net—Dugan, of St. Charles county, sold 28 at 8 1-2c net—O. Dings, of Montgomery, sold 5 at 8c net—Wm. Scitless, of Montgomery county, sold 17 at 9 1-4c net—B. Clark, of Scott county, Ill., sold 17 at 7c net—Goldsmith, of St. Louis county, sold 11 at 7 1-2c net—Joseph Mulhall, of do sold 3 at 8c, 1 at 7 3-4c, 2 at 7 1-4c, and 2 at 7c net—Thomas Dann, of St. Louis county, sold 17 at 6 1-2c net.

HOGS—Stonebraker, of St. Charles county, sold 50 of 9c net—McFaul, Sangamon county, Ill., sold 27 at 6c net—L. W. Brown, of Sangamon county, Ill., sold 70 at 5 1-2c net—A. Housley, of St. Louis county, sold 22 at 5 1-2c net.

SHEEP—Goldsmith, of St. Louis, sold 100 at 4 1-2c gross.

No stock in the yards at 5 o'clock, p. m.

Cattle are in demand; good quality will sell readily from 8c to 8 1-2c net. Butchers offer from 5 1-2c to 6c net for good qualities of hogs.

CONTENTS OF NO. 2, VOL. VII.

Removal: Printing Office; Farmer's Warehouse, Garden Seeds. 97
Feed Cutters: The Corn Planter; Plow; Mistaken; Remittances; Orange Orange Plants and Seeds. 98
Illinois Agency: E. W. Jewett, Esq.; Pike County Nursery; Gasconade County; Lafayette County; Blue Grass for Winter Pasture. 99
Plow Seed. 100
Oil Cakes: The Junction; Silver Hill. 101
Pressing: Corn Planter; Pigsties. 102
Cross Maraling. 103
Good for Egypt: Gov. Matteson on Agriculture. 104
Gypsum, or Plaster. 105
Fruits and Grains of Oregon. 106
The Valley Farmer; Rabbits. 107
Pasture Grass—Maltese; Profitable Sheep. 108
Illinois State Agricultural Society; The Farmer; 109
Whiskey and New Paper; Lord Spencer on Pure Breeds; Whisk to Paint Houses. 110
Three experiments in Cultivation. 111
Geological Survey of Missouri. 112
The Orange Orange. 113
Cure for Milk and Butter. 114
Lined Cakes: An Effective Method for Destroying Hogs. 115
Care for Food in the Field To Measure Grain in the 116
Bulky Curious Habits of the Brown Sand Hill Crane. 117
A Sheep Speculation; Clean Clover Seed vs. Chaff. 118
A Chapter on Spies. 119
What can be done in a Garden; Planting Fruit Trees. 120
How to raise Melons; The White Mint; Leguminous Plants. 121
The Pest Agriculture in Schools. 122
Where Cakes come from; How to do Up Shirt bosoms. 123
(Family Circle) Encouraging; The Father at Home; Husband. 124
The Little Ones; Educating Children. 125
Scallies; Salt Sauce; Ketchup; Soap; Good Salt. 126
Good Johnny Cakes; How to do Up Shirt bosoms. 127
Wash for Hair; Vegetable Seasoning; Clear Coffee; Lemon Flavour. 128
Garden of Adam and Eve (Poetry); Management of Children; Influence of Women's Kind Words. 129
The Sense of Justice; Will the Lord Make Me Over? 130
Annie. 131
Live Stock Market. 132

PIKE COUNTY NURSERY.

FOR SALE.

50,000 Apple Trees.

All graded underground, suitable for transplanting next spring. Our stock is exclusively made up of well-tried kinds. Long experience and determination to do the thing that's right, with water-land, enable us to give our customers more satisfaction. Ten cents per tree, at the Nursery, (with moderate charges for packing, delivering on the river and shipping) is our price for all good trees as we have bought any where. We have also a few hundred Cherry and Peach trees—the former at 20c the latter at 10c each. All orders must be accompanied by the name, or non-responsible men, in which cases trees will be shipped under acceptable plan. Those who intend to plant trees before buying elsewhere. Messrs. Dickey & Blue, of Brunswick, Mo., will act as agents for the sale of trees in that section of country. Responsible business men, at any of the shipping points, or in other towns and neighborhoods, will be acknowledged as agents on such terms as may be agreed upon between them and the nursery—our terms in the usual arrangement being set forth above. Persons wishing further information concerning our fruit and trees, are cordially referred to ANY and ALL who can give it. For further particulars address the undersigned through the Louisiana, Mo., P. O. Nursery situated 5 miles South of Louisiana and 6 West of Clarksville, Mo.

WM. SPARK & BROTHERS.

January 8, 1885.

Missouri Seed Store.



JOHN LARGUE,

Wholesale and Retail Dealer in all kinds of
Farm, Flower and Garden**SEEDS,**

GARDEN TOOLS & FARMING IMPLEMENTS.

No. 4 North Main Street,
ST. LOUIS, MO.

At this establishment the subscriber has in store, and intends keeping constantly on hand a good supply of

GARDEN AND FLOWER SEEDS.

Grown by the most approved establishments in the United States and Europe, and can confidently recommend them as fresh and genuine. They will be sold by the pound, ounce, or paper, at the lowest possible rates.

ALSO

CLOVER,

BLUE GRASS,

ORCHARD AND RANDALL GRASS,

HEMP,

CANARY,

BLACK AND YELLOW LOCUST SEED,

APPLE,

PEACH AND QUINCE SEED,

TOP ONIONS,

MUSTARD SEED, BLACK AND WHITE.

OSAGE ORANGE SEED

For Hedges, with a General Assortment of such Tools and Implements as are required for Gardening and Husbandry.

MIDDLESEX HOGS.

THE undersigned has for sale, four thousand bred Middlesex Boars, six months old. Person wishing to obtain full blooded stock of this desirable breed, are invited to call and see them. Any further information may be obtained on application to the editor of the Valley Farmer in St. Louis, or to the subscriber on his farm in Central Township, thirteen miles west of St. Louis.

D. LACKLAND.

Poultry, Pigs, Sheep and Horses.

The undersigned has for sale the famous DORKINGS, BLACK SPANISH, AND LUTVIAN, and most of the popular breeds of Poultry. Also, ESSSEX, SUFFOLK, and PORTUGUESE PIGS and FRENCH MERINO SHEEP.

All of the above, bred from his IMPORTED STOCK, selected by himself in Europe. Also, TWO MORGAN BLACKHAWK MARES, in foal by the Old Blackhawk, and one Three Year Old STALLION, "Black Flying Cloud," of the original Blackhawk Morgan, three-fourth blood, broke to the harness, gentle, high spirited, of good action, very fast in trot and walk.

SOL. W. JEWETT,
Middlebury, Vermont.**Suffolk Pigs.**

THE subscribers are now prepared to receive orders for pure Suffolk Pigs, bred from stock imported in 1849, by late W. M. STICKNEY, and by the subscribers in January, also, an importation of 12 in October, 1855. Address

JOSEPH STICKNEY, Watertown, Mass.
ap 54-5m ISAAC STICKNEY, Boston, Mass.

SUFFOLK AND ESSEX

FANCY POWER AND LOP-EARED BABBITS, HT
For sale byW. S. LUNT,
Findlay, Ohio.

ILLINOIS AGENCY.

Farming Implements and Machines,

We are prepared to furnish McCORMICK'S REAPER and MOWER for the coming harvest. Threshing Machines Walker & Co.'s PREMIUM STEEL PLOW, which received a Diploma at the late St. Clair County Agricultural Fair; CORN PLANTERS, with which one man and one horse can lay off, plant and cover in hills, six acres of corn per day. Horse Rakes and other improved Farming Implements and Machines.

Belleville, Illinois.

THOS. WALKER & CO.

Osage Orange Plants and Seeds.

P. W. have at this place, thirty-five acres of splendid Plants, which we sell at \$5 50 and \$3 50 per 1000, for Nos 1 and 2. Should one man or a dozen men, in one order, take 100,000, (enough for 19 miles,) we put them as low as \$3 per 1000 for the best, carefully assorted, well boxed and warranted.

Seed fresh from Texas at \$1 per lb.; \$6 per peck, and \$20 per bushel, with a liberal discount to agents on both plants and seeds. Full directions accompany each lot sold. All communications promptly attended to.

McGREW, LEAS & CO.

Successor to Jas. Sumpter & Co.

Kankakee City, Ill., Jan. 19, 1855.

ESTABLISHED 1845.

LABELS! LABELS!

OF ALL DESCRIPTIONS and for every business, constantly on hand, and made to order, at the Eastern Prices, at the

PHENIX LABEL FACTORY AND PRINTING OFFICE,

No. 25 Franklin Avenue, St. Louis, Mo.

Brands and Fac-Similes of every character got up in the finest style of the art.

Feb.

JOHN T. WITHAM, Proprietor.

A NEW PAPER will be issued on the first Saturday in March, entitled

THE AMERICAN ECLECTIC.

A Repository of News, Literature, Science and Art.

PRICE, \$2 00 per annum, in advance. Size of paper, 24 by 37 inches, with illustrations, and bold clear type.

JOHN T. WITHAM & Co., Publishers, No. 35 Franklin Avenue, St. Louis, Mo.

N. B. A very limited number of advertisements, without cuts, will be received at the regular rates, if accompanied by the cash. No single advertisement can exceed three squares, or thirty lines.

Editors giving the above an insertion, and sending the paper containing it to the Eclectic, will be entitled to a copy for one year.

PAGE'S PORTABLE CIRCULAR

SAW-MILL AND HORSE-POWER.—The most useful and necessary machine in operation—is simple in construction and easily kept in order, and can be moved as readily as a threshing machine, and put in operation at a small expense. It will saw from one to two thousand feet of lumber a day, with one team of six horses, is an average business, and in a better style than any other mill now in use. It is equally well adapted to steam, water or horse power.

The undersigned, agents for the patent, would announce to the public that they are now prepared to furnish mills, with or without horse power, of superior quality and workmanship, with the right to use the same, upon the most favorable terms, at their manufactory, No. 302 Second-st., St. Louis, Mo. We also have the right for the manufacture.

CHILD'S PATENT DOUBLE SAW-MILLS.

An order addressed to us will be promptly executed, and any information in regard to mills cheerfully given.

Persons ordering mills will please mention the State and County in which they wish to use them.

KINGSLAND & FERGUSON.

New Corn Planter.

THIS MACHINE

First Premium

NEW YORK,
WISCONSIN

AND IOWA

STATE FAIRS.



MADE AND SOLD BY

E. LEIGH.

OFFICE AT

SMYTH & GORE'S,

19 LEVEE & 38 COMMERCIAL STREET,

SAINT LOUIS, MO.

WITH IT

ONE MAN

WITH

NO TEAM

WILL

DROP AND COVER

TEN ACRES

IN A DAY,

STRAIGHT ROWS

EACH WAY

This is the best and cheapest tool the Farmer can now buy. It not only makes quick and easy work, but it does its work well. It may be adjusted to plant any width or depth, or an average of any number of kernels. Its planting is uniform, never deep at one time and shallow at another. Every hill is just right. With it you may cover the corn as you choose;—either press the earth over the seed, as is done with the hoe or roller; or allow the earth to fall lightly over the corn so that the blade can spring up freely—a far better way. It will, however, cover either way, as the farmer may choose. It sets the corn in the hills, and the hills in the rows, both ways, so exactly right, that it is very easy to tend afterwards and may be kept clean, with the plow alone. The inventors and patentees say:

"This Corn Planter, is, for lightness, simplicity, effectiveness and cheapness, all that we can desire. The following particulars will show the reason of this statement:

1. It is light—weighing only ten pounds.
2. It has but one Motion—That does all the work—selects the corn—drops it—deposits it at an adjusted and uniform depth in the soil, and covers it. All this is done by simply pressing it down like a staff, lifting and moving forward. This single motion is, also, naturally and easily made.

3. It is Thorough—There is no random planting. The hill and each kernel can be put precisely where it is wanted.

There is no Uneven Covering.

It, also, leaves the earth in the best condition, pressing it

Beneath and Around the seed, but not over it. Moisture comes from the subsoil, and better through pressed than unpressed earth. The seed lies in the earth, and is, therefore, in the very best condition to

Receive Moisture

and also the air; both being essential to quick germination. The earth, on the seed, should be shallow and light, so that the blade may easily and quickly come up. The closeness of the stalks in the hill is necessary for close cultivating. The certificates of farmers show that they are beginning to feel this already.

Such position of the stalks does not in the least retard their growth. Experiments have proved this. Much of the seed, dropped by hand, falls together. Did any farmer ever discover inferiority in such hills? The stalks always find ample room, while the roots range as freely in the soil as if the stalks were far apart. Hundreds of acres planted with these machines have produced

AS LARGE CROPS OF CORN AS

Any in the Country.

We have found no man who holds to the objection, after a little observation, and looking into the reason of the case. He finds the practice of scattering the kernels in the hills

based upon tradition rather than upon experiment.

PERFECT CHECK ROWING is one of its merits—**UNIFORMITY OF DROPPING** is another. These **cardinal points, when accomplished, show a Planter to be**

THOROUGH WORKING.

1. **It is Cheap.**—Those who have used the machine say, that

One Person with it

can do the work of **FOUR PERSONS WITHOUT IT.** Used during the planting time, it more than **thrice pays for itself the first season.** If labor be regarded as money, farmers must consider this a

Cheap Agricultural Implement.

This New Corn Planter was thoroughly tested last season. Several hundred acres were planted with it, and the results were in every respect favorable and gratifying, going far beyond the most sanguine expectations of the inventors themselves.

READ THE FOLLOWING

STATEMENTS FROM THOSE WHO HAVE USED IT

ROSCOE, ILL., July 15th, 1854.

Messrs. Randall & Jones.—This certifies that the Corn Planting Machine which we obtained from you last spring, worked first-rate. We planted thirty acres. The corn planted with the machine, in dry weather came up some time before hoe planting, which was done at the same time. This was owing to pressing the earth beneath the corn. Our hired man who used the machine would plant as fast as two boys would drop, and two men would cover, and do it better. We can cultivate closer, and the corn is firmer in the ground than corn raised from hoe planting. We would not be without this machine.

Yours, &c.,

L. A. FASSETT.

WM. KANTON.

SHIRLAND, August, 1854.

This certifies that I have planted twenty-five acres of corn with Randall & Jones' Corn Planter. It plants much better than by hand; I can cultivate my corn much better than after hoe planting. My corn stands first-rate on the ground. I can plant as fast as four hands can plant with a hoe.

SEWELL, AUSTIN.

ROCKTON, July 21st, 1854.

I made use of Randall & Jones' Planting Machine last spring, and planted ten acres. It was a very fine working machine, and saved the labor of four hands. My corn looks well, and cultivates better than hand planting.

O. C. WRIGHT.

ROCKTON, July 16, 1854.

This certifies that I used one of Randall & Jones' Corn Planting Machines last season, and with my own labor planted 50 acres of corn. I find it to be a well-working machine, and more uniform both as to dropping and planting than the usual method. I can plant an acre in an hour easily, and by pushing can plant two acres an hour. I planted at one time 6 1-2 acres in 3 1-2 hours. The corn stands as well as any other, tends twice as well, stands as well on the ground, and grows just as well as that which is planted further apart. My neighbors say, they would not undertake to raise corn without one of these machines. After my planting was done, there was great strife to get my machine the balance of the season. (Randall & Jones having sold out all early.) Every person was convinced of its superiority over hand-planting. I consider it to be the most labor saving machine for the money that the farmer can get.

IRA CUMMINGS.

BYRON, OGLE CO., ILL., July 22d, 1854.

Randall & Jones.—Dear Sirs—I am happy to inform you that your Corn Planter has given us good satisfaction. We find that our corn planted with the machine, came up better, is more uniformly worked, and has got a better

Such a Machine is to the farmer what the rifle is to the hunter, and is as much better than the hoe or plow, as the rifle is better than the old musket or blunderbuss.

It weighs rather less than a common rifle, and is much easier to carry and handle.

It never misses fire, always putting the corn in the hill, and always exactly where you wish it to go. You have only to set it down right, as you take good aim with your rifle, and it sends its charge exactly to the right spot. It makes quick and sure work of it. It might well be called the Farmer's Rifle—or the Rifle Corn Planter.

Your obt. servant,

LUIGIUS READ.

ROSCOE, ILL., June, 1854.

I planted twelve acres of corn last spring, with Randall & Jones' Corn Planter. It operated splendidly; I don't think there are five hills missing. My corn tends four times as well as hoe planting. My land was covered with corn stalks, and very bad and rough, as if I could plant four times as fast as a man could in the ordinary way. I believe this machine to be the most labor-saving implement for the price, that the farmer can possibly obtain.

HENRY BRADLEY.

ROSCOE, ILL., July, 1854.

We used Randall & Jones' Corn Planter the last season, on twelve acres. We could plant eight acres per day, better than it could be done with a hoe. The corn is in better condition, both for cultivating and hoeing, than hoe planted corn. Our corn stands well on the ground. We think the Planter almost indispensable for large farms.

KILEY & ASA SWERT.

HARRISON, July 21st, 1854.

Randall & Jones.—Sirs—The machine for planting corn which I bought of you, is the greatest labor saving machine on a farm. I planted sixty-five acres, better than it can be planted with a hoe. My corn stands better and tends better than hand planted corn. The seed being placed in firm earth, the grown up corn stands stronger, for this reason than other corn. I wish you success.

HENRY N. THOMAS.

CHERRY VALLEY, Boone county, Aug. 10, 1854.

Randall & Jones.—Sirs—Having used one of your Planters last spring to plant a large amount of corn, I found that it saved an immense deal of labor. Why, your machine in planting is just what the locomotive is in traveling. It is very accurate in its work, as well as speedy. My corn stands first rate on the ground. That planted by the machine in dry land came up before the hand planting.

Yours, &c.,

ELI HOGARBUS.

NEW HARRISON, July 14th, 1854.

This certifies that I planted last spring forty acres of corn, with Randall & Jones' Planting Machine in five days.

This was by my labor alone. My land was bad, and covered with corn stalks; I think it was well planted as could be done with a hoe. My corn stands well, and is easy to stand of dirt off the roots. **EDWARD COLLYER.**

BELOIT, Wis., July 17th, 1894.
I used one of Randall & Jones' Corn Planters this season, to plant thirty-five acres. It worked very well indeed. I consider it a great saving of labor in planting, but it saves more in cultivating. The corn stands just as well as when the stalks are further apart in the hill. The weeds have no chance to spring up among them. **A. BOONE.**

BELOIT, WIS. Co., Wis., July, 1894.
I feel a pleasure in stating that the Corn Planting Machine which I bought of Randall & Jones, exceeded my expectations. I planted thirty-five acres; my corn stands firmly on the ground. This machine saves fully as much labor in cultivating as in planting. **A. B. REYNOLDS.**

The above results were obtained last season with a few of the first Planters made while the invention was in progress. The machine in its present perfected form, will do more work with greater ease, and do it better.

It is not surprising that an implement which can do all this, and has done it, has taken the first premium at the State and County Fairs where it has been exhibited. It was a matter of course. And the farmers who put in their corn with it this season, will go ahead of their neighbors, they will take the premium in Corn Planting, they will also save work and make money on every Machine they use. So, send in your orders, the sooner the better. "First come first served," must be our motto, though all shall be supplied, if possible.

The price is \$10. This is the uniform retail price all over the United States. To encourage an extensive use of it this season in every county, so that every farmer may see it working in his own neighborhood, we make the following offer:

Each person sending \$50, (specie funds,) for five Planters, shall have a Planter gratis.

All communications to be addressed, (post-paid,) to E. LEIGH, care of Smyth & Gore, St. Louis, Mo.

SAXTON'S HAND BOOKS

Of Rural and Domestic Economy

All Arranged and Adapted to the Use of American Farmers. Price 25 cts. each.

Hogs: Their Origin and Varieties; Management with a View to Profit, and Treatment under disease. By H. D. Richardson.

The Hive and Honey Bee; With plain directions for obtaining a considerable Annual Income from this branch of Rural Economy. By H. D. Richardson. With Illustrations.

Domestic Fowls; Their Natural History, Breeding, Rearing, and General Management. By H. D. Richardson, author of "The Natural History of the Fossil Deer," &c. With Illustrations.

The Horse; Their Origin and Varieties; with plain directions as to the Breeding, Rearing, and General Management, with Instructions as to the Treatment of Disease. Handsomely Illustrated—18mo. By H. D. Richardson.

The Rose; The American Rose Culturist; being a Practical Treatise on the Propagation, Cultivation and Management in all Seasons, &c. With full directions for the Treatment of the Diseases. Handsomely Illustrated—18mo. By H. D. Richardson.

The Pests of the Farm; With Instructions for their Extirpation; Being a Manual of plain directions for the certain Destruction of every description of Vermin. With Illustrations on Wood.

ROCKFORD, Nov. 10, 1894.
Messrs. Randall & Jones:—I used last spring a machine, planting a part of my field with it. I have now husked my corn, and had a much better yield from that part which was planted with the machine. It has had a better growth the whole season. I know not how to account for it, unless it stood more firmly in the ground, and was not injured as much by the drought, and, also, standing close together in the hill, could be cultivated better. I now regard your Planter as doing better work than can be done in any other way. **WM. D. FENNOCK.**

ROCKFORD, Aug. 23, 1894.
In the presence of more than fifty persons assembled at the ground, an acre was planted, August 21, by one man, using Randall & Jones' Planter, in twenty-five minutes. We examined hundreds of hills, as also did several other persons, and in no hill was the seed found missing. The number deposited was also remarkably uniform.

ASA B. MUNN,
WM. HOOKER,
B. F. FLETCHER.

An Essay on Manures;

Submitted to the Trustees of the Massachusetts Society for Promoting Agriculture, for their Premium. By Samuel H. Dana.

The American Bird Fancier;

Considered with Reference to the Breeding, Rearing, Feeding, Management and Peculiarities of Eggs and Young Birds. Illustrated with Engravings. By Dr. J. Brown.

Chemistry Made Easy;

For the Use of Farmers. By J. Topham.

Elements of Agriculture;

Translated from the French, and adapted to the use of American Farmers. By F. G. Skinner.

The American Kitchen Gardener;

Containing Directions for the Cultivation of Vegetables and Garden Fruits. By T. G. Freeman.

The Bee Keeper's Chart;

Being a Practical Treatise on the Insect, Habits and Management of the Honey Bee, in all its various branches. By E. W. Phelps.

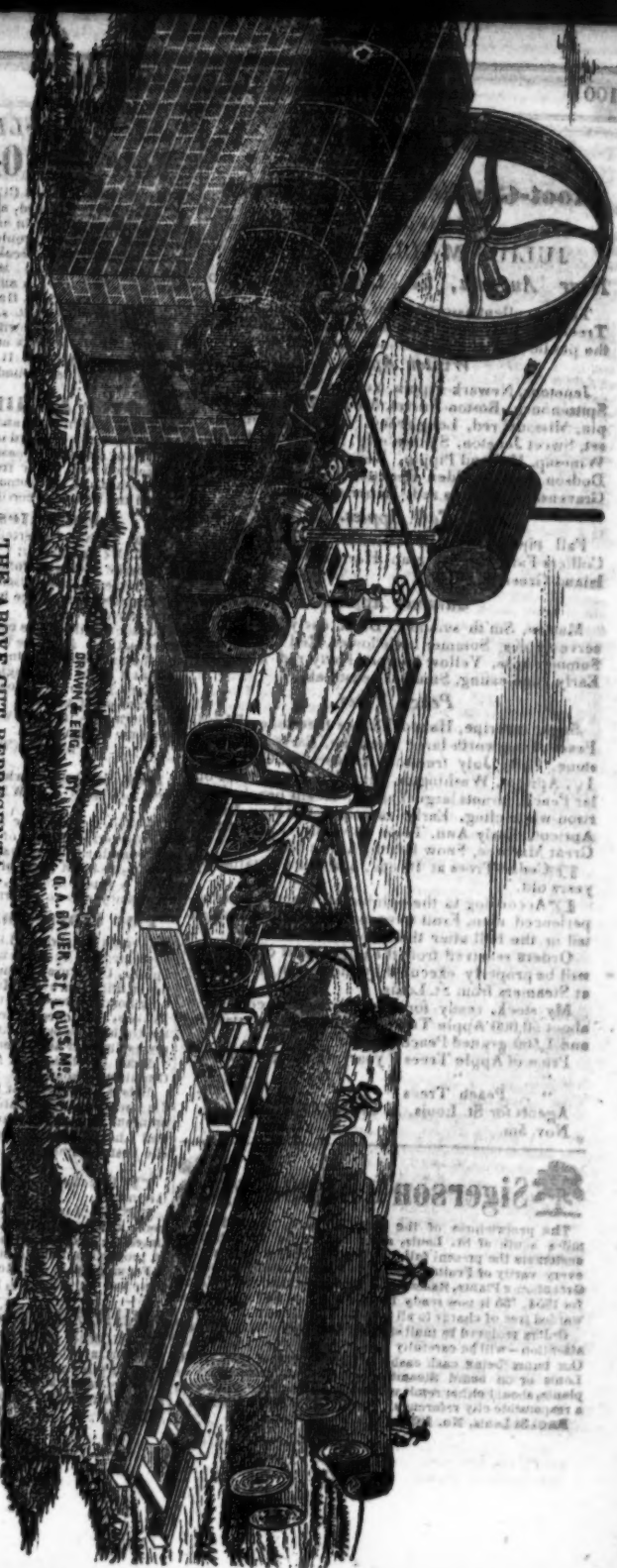
Every Lady her Own Flower Gardener;

Addressed to the Industrious and Economical who contain Simple and Practical Directions for Cultivating Plants and Flowers. By Louisa Johnson.

The Cow, Dairy Husbandry and

Cattle Breeding.

By M. M. Milburn, and revised by H. D. Richardson and Ambrose Stevens. With Illustrations. For sale by S. S. HOMANS Bookseller, Corner Fourth and Washington avenue, St. Louis.



DRAWN & ENG. BY
O. A. BAUER, ST. LOUIS, MO.

THE ABOVE CUT REPRESENTS A **PORTABLE CIRCULAR SAW MILL.** AS ATTACHED TO STEAM POWER.

These Mills, with steam power, are capable of sawing from three to six thousand feet of lumber per day, varying according to the power applied and kind of lumber sawed. With the double Mill (as represented in cut), any kind of lumber can be sawed. Having the exclusive right for manufacturing for a large portion of the territory of the West and South for *Page's Patent Single Saw Mill* and *Child's Patent Double Saw Mill*, we can furnish either the single or double Mill for steam or water power. The *Page's Patent Single Saw Mill* is better adapted to the wants of the country than any other kind of Mill now in use. They can be put in operation in small spaces, are durable and easily kept in order, and will saw more lumber in the same time than any other. All orders addressed to us will be promptly filled and any information in regard to Mills cheerfully given.

MINGELAND & FERGUSON
 PHOENIX TO NOBLY, St. Louis, Mo.

CATALOGUE OF Root-Grafted Fruit Trees CULTIVATED BY

JULIUS MALLIONKRODT.

Near Augusta, St. Charles Co. Mo.

This excellent assortment of vigorous and healthy Trees will fully enable me to merit the confidence the public may choose to honor me with.

Winter Apples.

Jenetsen, Newark Pippin, Yellow Newton Pippin, Spitzenburg, Boston Russet, Milam, 22 Ounce Pippin, Missouri red, Long green Pippin, Golden Russet, Sweet Jenetsen, Spitzenburg, Renette of Berlin, Winsap, Holland Pippin, Renette of Normandy, Dodson Apple, Golden Renette, Father Abraham, Gravenstein, Fryor's red, Imperial Pippin.

Fall Apples.

Fall Pippin, Rambo, Culville, Maidens Blush, Colliers Full, Hughes' crab, Harrison cider, Rhode Island Greening.

Summer Apples.

Mattos, Smith summer, Daxet early July, Preserve Apples, Summer belleflower, Red belleflower, Summer-rose, Yellow harvest, Early red Margaret, Early June eating, Summer redstreak.

Peach Trees.

Sugar rareripe, Hancock large freestone, Blood-Peach, Longworth large freestone, Early York freestone, Early July freestone, Silverskin, George the 1y, Apricot, Washington cling, Hills Madeira, Poplar Peach, Grants large Yellow, Heath peach, Morrison white cling, Early rareripe, October Peach, Apricot, Early Anna, Teton de venus, Early Cling, Great Maribee, Snow Peach, Albert Cathlam.

—Cedar-Trees at 10 cts., and some Catalpa two years old.

According to the opinion of practical and experienced men, Fruit trees may be safely transplanted in the Fall after the 1st of November.

Orders received from the upper part of Missouri will be properly executed by the return of the Pack-at Steamers from St. Louis.

My stock, ready for sale this season consists of about 50,000 Apple Trees of 2 and 3 years standing and 1,500 grafted Peach Trees.

Price of Apple Trees 3 years standing 20 cts.

" " " 15 cts.

" Peach Trees 20 cts.

Agents for St. Louis, A. Lee, & Co., Main st.

Nov. 5m.

Sigerson's Nursery

The proprietors of the above Nursery, located seven miles south of St. Louis, are prepared to furnish their customers the present fall and coming Spring with almost every variety of Fruit, Shade and Ornamental Shrubbery, Greenhouse Plants, Roses, &c. Their Descriptive Catalogue for 1884, '85 is now ready for distribution, and will be forwarded free of charge to all post-paid applicants.

Orders received by mail or otherwise will receive our best attention—will be carefully packed and shipped as directed. Our terms being cash cash on the delivery of trees in St. Louis or on board Steamboats parties ordering trees or plants, should either remit us the amount or furnish us with a responsible city reference.

JOHN SIGERSON &

Box 10, St. Louis, Mo. 1884.

McLEAN'S

Volcanic Oil Liniment.

THE MIRACULOUS CURES that this celebrated medicine has performed, after all other remedies had failed, warrants the proprietor in asserting that it is the only Liniment that will cure Chronic or Inflammatory Rheumatism, Paralysis, Stiffness or Weakness in the Joints, Sciatica or Lumbago, Contracted Muscles, Bruises, Neuralgia, Toothache, Headache, or any Pain. It will remove any Swelling, Tumor, Pile, Hard Lump, Caked Breast, Boils, Nipples, Bites of mosquitoes, or any inflammation. And it will cleanse, purify and heal the FURULET ULCER SORES on the legs or shins, no difference how long they may have existed. It will also soothe and heal Burns, Scalds, Fresh Cuts, wounds, &c., sooner than any other remedy.

Over A Million of Bottles

Have been sold in 1883, and the demand continues daily, and we have never heard of a case wherein it has failed to cure any external disease, when properly applied. Who then will suffer from Rains, Sores, or Swellings, when a safe and sure remedy is so easily obtained? Read the following certificate, which is

Incontestable proof

of what we have asserted.

J. H. McLEAN—Sir: I feel it a duty I owe to the public to make known the following, hoping they may learn by my experience, and discard a worthless stuff which has been pressed into notice by false certificates and long advertisements.

For six months I was confined to my room a cripple from Rheumatism. My knee was swollen tremendously, producing the most severe pains. The muscles were contracted so that I could not straighten my leg at all. I applied the Mustang Liniment for four weeks, but it did me no more good than any other grease. I obtained and used your Volcanic Oil Liniment—in three weeks it relaxed the muscles, and cured me permanently.

AMERICUS CASEDAY, Saline Gap, Ill.

I saw Mr. Caseday when he was afflicted, as stated, and he is now well. W. M. McLEOTT, Pinkneyville.

Reader, if the above is not sufficient to convince you of the wonderful efficacy of the Volcanic Oil Liniment, call and examine the THOUSANDS which we have in our possession, from all parts of the country; and if you will purchase a supply from us, and it does not give satisfaction, the money will be returned to the purchaser.

For Horses and other Animals.

McLean's Celebrated Liniment is the only safe and reliable remedy for the cure of Spavin, Ring Bone, Wind Bells, Splints, Unnatural Lumps, Nodules or Swellings. It will never fail to cure B. B. Head, Bad Evil, Flatulency, Old Ranging Sores or Swellings, if properly applied. For Sprains, Bruises, Scratches, Cracked Hoofs, Chancres, Raddle or Gular Galls, Cuts or wounds, it is an infallible remedy. Apply as directed and a cure is certain.

Read the following from Mr. Wells, of the St. Louis Omnibus Company.

This is to certify that I have used the Mexican Mustang Liniment, and McLean's Volcanic Oil Liniment on omnibus horses that were lame, sprained, and for swellings and I have found McLean's Volcanic Oil Liniment to be the best Liniment.

ERASTUS WELLS.

Of the firm of T. & C. Ogden, German.

Directions accompany each bottle in English and German. This Liniment is now put up twenty-five cent, fifty cent, and dollar bottles. The fifty cent size contains three times the quantity of the twenty-five cent size, and uses in proportion to the cost.

For sale by J. H. McLEAN, Sole Proprietor, corner of Pine and Third streets, St. Louis, Mo.

THRESHING MACHINES AND

HORSE POWERS.—We are manufacturing and have for sale Cox & Roberts' Patent Thresher and Grander. They thresh and clean the grain ready for market, are very durable, easily kept in order, and sold at a very reasonable price. Orders respectfully solicited.

KINGSLAND & FERGUSON.

THOMAS' Horticultural Garden and Nursery.

Carroll street, opposite Marine Hospital.

SOUTH ST. LOUIS, MO.

I would respectfully remind the citizens of St. Louis and surrounding country that the season for transplanting Fruit and Ornamental trees is fast approaching. Great additions have been made in every department, more particularly in our fruits. A more select and varied collection has never been offered for sale in the South-west, consisting in part of over one hundred varieties of

APPLES,

PEACHES,

PLUMS,

CHERRIES,

CATAWBA AND ISABELLA GRAPE VINES.

Purchasers may rely on everything being what is represented, and sales may be effected on very favorable terms.

Orders left at Wm. N. Plant & Co.'s, 14 Main St., or at the Valley Farmer Office Chestnut street, between Third and fourth streets, or at the Garden will be promptly attended to. Catalogues will be sent to all post-paid applicants.

Osage Orange Seed and Plants

THE undersigned, successors of JAS. SUMPTER & Co., would return thanks for past favors, and solicit future patronage. We have a large lot of very superior Plants grown where they fortunately had a sufficiency of rain. Those wishing to purchase, either by wholesale or retail, we are content we can accommodate not only in plants, but also in price. We also import our Seed direct from Texas. It shall be fresh and of the best quality.

We continue to plant, cultivate, trim and mature a complete fence at from 75c. to \$1.00 per rod—one-third to be paid when planted, and the balance when completed. Hedges set and warranted at from thirty to forty cents per rod. Hedges grown for what disgruntled persons will say they are worth when completed. Hedges completely grown at \$1.50 to \$1.75 per rod, to be paid for when completed. We wish a large number of active business men, living in localities where hedging is needed, to take hold with us in the destruction of hedges, the sale of Plants, Seeds, &c., and share the confidence of their neighbors, shall receive a good chance. Let us hear from you, gentlemen. The enterprise is not only laudable—but will PAY.

Darwin, O., Sep. 20. J. H. LIGHTNER, LEAS & CO.



J. H. LIGHTNER,



No. 66 Second street, (between Olive & Locust),

Dealer in STOVES.

Queen of the West, just Queen, Buckeye, Preference and Premium Cook Stoves—also select Parlor stoves, Grates and Ranges.

PLOWS.

Rolling, Peoria, Jewett, and other patterns—also, Moline PAIRING BREAKERS.

SAVES.

Safe Patent Concrete Fire Proof Safes, unsurpassed in security against fire, thieves, and dampness.

Valley Farmer Agency.

FOR THE PURCHASE AND SALE OF

Agricultural Implements and Machines.

STOCK, POULTRY, SEEDS, BOOKS, &c.

All orders attended to with promptness. Address

R. ABBOTT, Editor Valley Farmer,

No. 219 Broadway and 303 Fourth street, St. Louis, Mo.

To Farmers and Merchants. TEXAS NEWS!!

AUSTIN, Nov. 13th, 1886.

Letter from the special Agent for Texas in which he says:

I have lately received letters from a number of those who have your LINIMENT for sale, and they all say, that FLOYD'S AMERICAN PENETRATING LINIMENT is the only other that has ever been in Texas. Some of these write of wonderful cures it has performed; One of which I will here mention:

A gentleman who lives in Hunt Co., Texas had his foot munched more than ten months ago and had used all the salves and liniments to exalt, but all of no avail, it became so sore that he could not walk a step. I at last induced him to try FLOYD'S AMERICAN PENETRATING LINIMENT, and on the 18th day of October he commenced using it, and after using three bottles he was enabled to walk, although he had not before since he was hurt, and at this time he is well and at work on his farm, he wishes me to request you to publish the wonderful cure performed on him, that it may induce others similarly afflicted to use your Liniment and be healed. This man is an old and respectable citizen of Hunt county—his name is A. C. NORWELL.

Send a large amount of your Liniment here it will all sell, and quickly, Yours, Respectfully,

J. D. WHITE.

Floyd's American Penetrating Liniment

Will cure any of the following diseases:—Rheumatism, Swellings, Sprains, Bruises, Old Sores, Piles, Pain in the Back or Limbs, Weakness, or Stiffness in the Joints, Sore Throat, Head-Ache, Contractions of the Muscles, Inflammations, Felons, Lumps, Aque Cakes, Chafes, Corns, Erysipelas, Humors, Ringworms, &c., &c., upon mankind, where an external means is required.

Also, Fistula, Poll Evil, Wind Ga is, Sprains, Saddle or Harrow Galls, Strains, Weakness in the Limbs, Lumps or Swellings, Swarms, Farcy, Scratches, Big Head and Big Shoulder, Founder and almost all diseases of horses where an outward application is wanting.

ST. LOUIS, Mo., March 13th, 1886.

This is to certify that we the undersigned have used Floyd's American Penetrating Liniment, have found it beneficial and believe it to be one of the best and most useful Liniment now in circulation, we therefore take pleasure in recommending it to the public generally:—

Donaldson & Hall, St. Louis,	S. Birmingham, St. Louis,
Henry Gleber, do	Morse & Bro., Greenville,
Francis & Walton, do	C. Holles, do
J. H. Farber, do	J. H. Crocker, do
B. Bennett, do	P. Hubbard, do
Clark J. Morlon, do	D. S. Winer, Woodbury, Mo.
C. H. Wood, do	J. A. Laws, Jet Prairie, Mo.
Charles Perine, do	David Hill, Elm Point, Ill.
G. A. Benzner, do	D. W. Alexander, do
J. H. Siegfried, do	A. Kinawally Ohio,
L. H. Shorter, do	H. W. Jones, Amherst, Mass.
B. G. Parry, do	C. A. Talbot, Prescott, Wis.
J. S. Irwin, do	D. D. White, Austin, Texas.
A. A. E. Sawyer, do	P. Bond, Carlyle, Ill.
Wm. Young, do	

Manufactured by EDWARD A. FLOYD, Greenville, Ill.

Sold in St. Louis, by

BACON, HYDE & Co.;
CHARLES, BLOW & Co.;
FRANCIS & WALTON;
J. JAMES & Co.;
S. P. WETZEL & Co.;
HARNARD, ADAMS & Co.;
R. B. SNOW & Co.;
FLOYD & CHALLEN;
And by dealers generally.

J. J. DONEGAN

Wholesale and Retail Dealer in

SILKS, FANCY AND STAPLE

DRY GOODS.

At No. 60, MARKET STREET,

Five doors below Scott's Hotel, St. Louis, Mo.



PATENT COOKING STOVE.

The subscribers have just got out six new and heavy patterns of the above, celebrated Stove, in which we have made several valuable improvements, which makes them not only the best baking, but the most durable and perfect Stove in use. And we offer the Stove confidently as the best Stove made, and invite all in want of a good Cook Stove to examine our new Buck's. Every Stove will be warranted to bake perfectly even, and give entire satisfaction, or we will refund the money in full.

In this Stove the fire is brought directly under and very close to the boilers, and the oven which is the full size of the Stove, and much larger than that of any other Stove of the same size, is so constructed that the heat passes in flues around it in such a manner as to give it a perfectly even heat at top and bottom. Wherever this stove has been introduced, it has obtained a decided preference over all others, and will be found, by any one giving it a trial, to possess such unequalled excellencies in performing the various operations in cooking, and so great a saving of both labor and fuel, as to make it the interest of every family to possess one.

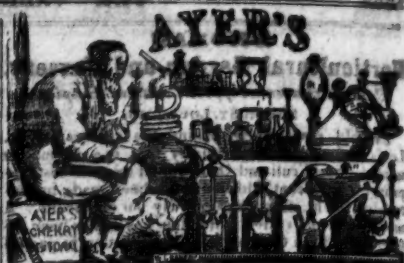
During the time Buck's stoves have been before the public, there have been issued from the Patent office a very large number of new patents of various of Cooking Stoves. These Stoves have each, in turn kept the nine days wonder of their season, and have then died away, to give place to some new thing, equally unsatisfactory and equally ephemeral.

In all this time, the reputation of Buck's Stoves has stood firm, and it is necessary in order to sell their wares, to counterfeit as nearly as possible the form and then by diligent efforts, attempt to palm off their productions upon the public as an "improvement" on the Buck Stove.

The simple fact that such trickery is resorted to shows at least, that in their estimation Buck's Stoves have a reputation beyond everything else in the shape of a cooking apparatus. No Stoves have been made yet which gives such uniform satisfaction wherever they have been well put up and fairly used, and we challenge the world to produce their equal, in so perfect a combination of all the points, essential to a good Cooking Stove. We respectfully invite purchasers at Wholesale and Retail, to examine our assortment of Stoves and Hollow Ware, which will be found the largest in the City, and we pledge ourselves to sell as low as can be bought in this, or any other Western Market. We would invite the attention of those in want of large Cooking Stoves, for Hotels, Seminaries, large Boarding Houses, etc., to our new pattern of large Hotel Stoves, being the largest cast Stoves in the West.

BUCK & WRIGHT

205 & 207 Main st., St. Louis, Mo.
January, 1854. Opposite Missouri Hotel.



CHERRY PECTORAL

For the rapid Cure of

**COUGHS, COLDS, HOARSENESS,
BRONCHITIS, WHOOPING-COUGH,
CROUP, ASTHMA, AND
CONSUMPTION.**

"And by thereto upon the bank thereof shall grow all trees for meat, whose leaf shall not fade and the fruit thereof shall be for meat and the leaf thereof for medicine."

Here was hope for the sick recorded long ago, and every year adds new proof to the assurance that these promises shall not fail.

As medical science discovers and designates the remedies nature has given; one by one, the diseases that afflict our race yield to the control of art. Of all the Maladies we suffer from, none has carried more victims to an untimely grave than Consumption of the Lungs. Subjoined we give some evidences that this too may be cured, and that Palmonary Complaints, in all their forms, may be removed by CHERRY PECTORAL.

Space will not permit us to publish here any description of the cure it has effected, but the agent below named will furnish our Circulars, free, wherein are full particulars and indisputable proof of these facts.

Sufferers, read and judge for yourselves:

For Influenza and Whooping Cough.

For Consumption.

Dear Sir:—I have repeatedly used your Cherry Pectoral for Whooping Cough and Influenza and have no hesitation in pronouncing it a complete remedy. Four of my children have been afflicted with these diseases, and the free use of the Pectoral has always afforded almost instant relief.

JAMES GLOVER.

We attest the truth of the above statement.

M. MCGINTY, Editor of the Nashville Wh.

J. M. EMMERTMAN, Druggist.

For Consumptive Cough.

Dear Sir:—For three years I have been afflicted with a Cough, so distressing that I frequently despaired of recovery; much of the time I was obliged to sit up all night in my chair, as my cough would subside me when I laid down. Having used many remedies without relief, I at last tried the Cherry Pectoral, which under Providence has cured me altogether. I am with gratitude, yours,

JAMES MCCANDLESS.

This is one of the Numerous Cures of Asthma

which have been accredited to Pectoral.

ALBANY, N. Y., April 17, 1854.

DR. AYER, Lowell. Dear Sir: I have for years been afflicted with Asthma in the worst form; but I have been obliged to sleep in my chair for the most part of the time, being unable to breathe my bed. I had tried a great many medicines to no purpose, until my physician prescribed, as an experiment, your Cherry Pectoral. As first it seemed to make me worse, but in less than a week I began to experience the most satisfactory relief from its use; and now, in four weeks, the disease is entirely removed. I can sleep in my bed with comfort, and enjoy a state of health which I had never expected to enjoy.

GEO. PARANT.

Commission and Forwarding Merchant.

NEW
AGRICULTURAL
WAREHOUSE



AND
SEED STORE.

DAVID LANDRETH, of Philadelphia,

Announces to all whom it may interest, that he has located at
No. 6 Levee and No. 6 Old Market Square, ST. LOUIS,
CITY BUILDINGS, LEVEE, between Market and Walnut, principal entrance
OLD MARKET SQUARE—~~to~~ Sign of the PLOW ~~on~~

A BRANCH OF HIS ESTABLISHMENT,

Where will be constantly kept a complete assortment of MACHINERY adapted to the FARM, PLANTATION, and GARDEN. His long practical experience in this branch of business qualifies him to judge of the relative merits of IMPLEMENTS, and none but those of real value will find place in

Landreth's Agricultural House,

SEEDS of all description will receive an important share of attention, ESPECIALLY THOSE FOR THE GARDEN, which being the produce of his own grounds, and reared under his personal inspection, will be found, on trial, superior to those usually offered for sale.

The undersigned being charged with the direction of LANDRETH'S AGRICULTURAL HOUSE, ST. LOUIS, respectfully invites the patronage of his friends and the public, assuring them of his best exertions to serve them satisfactorily.

GEO. BURNETT Jr.

CONSTANTLY ON HAND AT

LANDRETH'S AGRICULTURAL HOUSE,

No. 6 Levee and No. 6 Old Market square,

PLOWS, in great variety.
CULTIVATORS, or HOE HAR-
ROWS, various patterns.
CORN SHELLERS, for hand and
horse power,
STRAW AND CHAFF CUTTERS,
the most approved.
CORN AND COB CRUSHERS.
CIDER MILLS.
SAUSAGE MEAT CUTTERS.
" " STUFFERS.
FARMERS' PORTABLE FUR-

NACES AND BOILERS.
FANNING MILLS.
CHEESE and LARD PRESSES
CHURNS, most approved.
ROOT CUTTERS, for preparing
Beets, Turnips, &c., for Cattle.
DRILLS, for Farm and Garden,
REVOLVING HAY RAKES.

And nearly all IMPLEMENTS adapted to the tillage of the soil and harvesting crops,



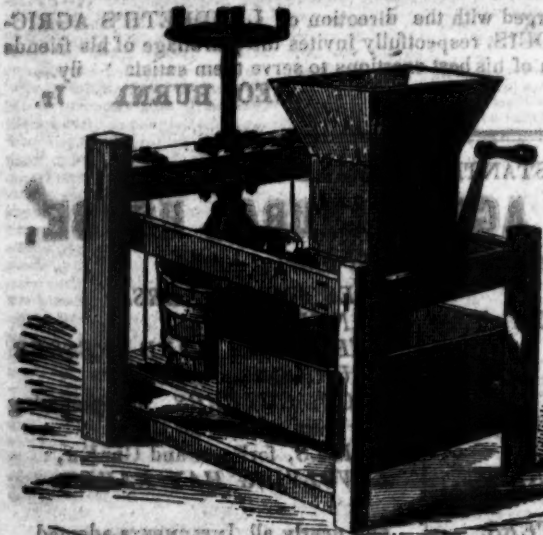
This machine was patented in 1860, and is now for the first introduced into the West. It is of extraordinary capacity and is undoubtedly destined to rank with the Mowers and Reapers which favorably exhibited the inventiveness of the American people. With a two horse railroad or tread power, one thousand bushels of corn may be threshed, separated from the cobs, and winnowed ready for market in one working day—with greater power and increased hands far more may readily be accomplished, but it is presumed ONE THOUSAND BUSHELS will satisfy most persons. With a single horse power, one hundred and forty bushels of ears have been shelled within an hour, not counting the ordinary labor.

Certificates of its capacity and admirable adaptation to the purposes designed, can be seen on application to the undersigned, who is sole agent for the sale of the machine in Missouri, Illinois, Iowa and Wisconsin.

Landreth's Agricultural House,

No. 6, CITY BUILDINGS, Opposite Old Market, St. Louis.

Hickock's Patent Improved Portable Cider Mill.



FOR SALE AT

LANDRETH'S

AGRICULTURAL

HOUSE

NO. 6,

City Buildings,

Opposite Old Market,

GEO. BURNET, Jr.,

SALESMAN MEAT CUTTERS, STUFFERS, FARMERS' PORTABLE PURCHASERS.